Ardeo and Mooa by Wilson). The map published by one of these mis- 175
sionaries (60) is innocent of villages. As to the cultivation of the country 361
they say: "At Tongatabuo the country is flat and enclosed, and, though little [797]
cultivated, very productive" (65, p. 385). [311]

By Mariner's time the complete breakdown of the central authority and [712]
the internecine wars had forced people to take refuge in fortresses (*kolo*) [721]
from time to time. This seems to be the origin of the modern Tongan villages,
all of which to-day are designated by the word *kolo*, though none are
fortified. The ruins of old fortifications are numerous. [172]

Although the necessity of living together for protection disappeared com- 361
pletely with the destruction of the fortress of Pea in 1852, villages neverthe-
less persist in Tonga and appear to have come to stay. Christianity and the [795]
copra trade are factors that contribute to the maintenance of village life. [439]

MODERN VILLAGE POPULATION

The large modern villages, such as Nukualofa-Maufanga on Tongatabu, [162]
Neiafu on Vavau, and Pangai-Hihifo on Lifuka Island, represent the acme
of development in village growth and consequently the greatest departure
from the rural distribution of population observed by Captain Cook. These 361
large villages are composed of an assemblage of unrelated family groups. 621
Thus, Hihifo, is said by one informant to comprise three groups of kindred
headed by the chiefs and matapule Tuita, Pouangi, and Tea. In the smaller [602]
villages, however, it seems likely that the inhabitants are bound to one an- [178]
other by blood ties and that these little communities do not depart far from
the grouping of people in ancient times. The tiny village of Siesia, Nukunukumotu
Island, is an example. The relationship of the 16 individuals of this
hamlet in 1920 are given below.

House 1

1. Kula, father of 5. A *toutai* (navigator or fisherman) and former mayor of Siesia. His wife was Finau of Folaha, Tongatabu, now dead. 361 621
2. Fatai, son's son of 1, named after brother of 1. 592
3. Maria, wife of 2. A woman of Maufanga, Tongatabu; upon marriage came at once to Siesia to live. 602
4. Solomon Tanaki, son's son of 1 and brother of 2, unmarried, named after brother of 1, by midwife. Born at Siesia.

House 2

5. Taani, son of 1, and father of 2, 4, 7, 8, 9, mayor of Siesia.
6. Mary Anna, wife of 5 and mother of 2, 4, 7, 8, 9.
7. Mili, daughter of 5 and 6, about 13 years old. Twin brother dead.
8. Latu, son of 5 and 6, about 16 years old. He and 13 call each other by brother terms. They are of course only cousins. [601]
9. Mary, daughter of 5 and 6, about 9 years old.

2: Mariner F-5 (1806-1810) 1818
OU9 Tonga OU9

Finow was strongly of this opinion, observing 829
that it was but fair to suppose that, in the same 634
proportion as the white men were superior to them in knowledge, so were the hotooas of white men superior to their hotooas in divine power. But to return from this digression.

Cow Mooala, after remaining a considerable 484
time at Navihi Levoo, sailed with his people for Tacownove, which is a district on the western side of Pau, the largest of the Fiji islands. Pau 000
is much resorted to by American vessels, and vessels from Port Jackson, for sandal-wood, which grows to perfection only at a certain part of the island, called Vooi'a. The principal market for this article is China; and the demand for it is so great, in proportion to the smallness of the place which produces it, that it is now growing scarce, and, consequently, dearer. Formerly they would give a considerable quantity for a few nails, but now they demand axes and chisels, and those, too, of the best quality, for they have gradually become judges of such things: whales' teeth are also given in exchange for it. The chiefs of the Fiji islands very seldom oil themselves, and, consequently, require very little of this wood, the principal use of it being to scent the oil. The natives of the Tonga 439
islands, however, who require a considerable quantity of it for the above purpose, complain

2: Mariner F-5 (1806-1810) 1818
OU9 Tonga OU9

439 heavily of its scarcity; and what renders the matter still worse for them, is, that the Fiji people, demanding a greater number of axes and chisels for a given quantity of the wood, these implements are growing very scarce at the Tonga islands, and plentiful at Fiji. Before the Tonga people acquired iron implements, they usually gave whales' teeth, gnatoo, mats for sails, and platt; but whales' teeth are exceedingly scarce, and the other articles are too bulky for ready exportation. The *sting* of the fish called stingray was also occasionally given, but these *stings*, which they use for the points
[136] of spears, are by no means plentiful. This fish is found in the greatest quantity at an island called Ooea, which lies about mid-way between Vavaoo and Hamoa. Another article of exchange is a peculiar species of shell, which they
[137] find only at Vavaoo, and is also scarce. It has already been remarked that the sandal-wood tree will not bear to be transplanted to Tonga.

000 During the time Cow Mooala was at Pau, a vessel was wrecked on a reef off that island. All the crew, except a couple, perished. The wreck was taken possession of by the natives; they got out of her a number of dollars, and a quantity of muslins, with some other East India commodities. From these circumstances it would appear that she was an American smuggler on

to sea, and returned to the Fiji islands to lay in 484
a second cargo.

The Fiji islanders make their canoes prin- 439
cipally of a hard firm wood, called *fehi*, which is
not liable to become worm-eaten; and as the 171
Tonga islands do not produce this wood, the 396
natives are not able to build canoes so large or 137
so strong as those of their instructors: all their
large canoes, therefore, are either purchased or
taken by force from the natives of Fiji. The 396
natives of Tonga take the greatest pains with
their canoes, polishing them with pumice-stone,
and paying every attention that they are not
more exposed to the weather than is absolutely
necessary. The canoes of the Navigator's [171]
islands are similar to those which were formerly
in use at Tonga, but the natives of those islands
never venture to the latter place but in canoes
manned with Tonga people.

Fono le, carving ornaments out of whales 306
teeth, for the neck, and inlaying clubs, &c. with 322
the same material. This art, as far as it regards 531
ornaments for the neck, is of Fiji origin; but [177]
inlaying clubs, wooden pillows, &c. is their own
invention. An account of the ornaments for
the neck has already been given, (Vol. I. p. 299.)
They inlay their clubs with extraordinary neat- 322
ness, considering the rude tool they employ, 531
which is generally a *togi* (or small adze), made 412
out of an European chisel, a piece of an old saw,

6. The references are to various mats of Tonga and to collecting them, figuratively, as a gift in honor of the dead man. The italicized words are names of mats. Tungua, Matuku, Uiha, Lifuka, are all in Haapai. 764 539

7. The reference is to the Tamaha (the daughter or son) of the Tui Tonga Fefine. The Tamaha lived in Tungua. Here she is called Falotuma, a species of hala. "Even if a mat obtained from Tungua should prove to be of not much account as a mat yet it derives value from its origin in the island of Tamaha" (12, pp. 178-189). [103] [644]

7a. "Mat of red feathers" means "mat adorned with red feathers." The form *hulu kula* is interesting, as the normal Tongan would be *fulu kula*. This form hints at the likelihood of the introduction of the adornment of mats with red feathers from some one or other of the groups of islands farther east.

8. Plover (*kiu*) and double-bird (*manulua*) are two of the designs used on the native cloth. [531]

9. Toku is a name occurring in several parts of Tonga (21), but evidently here it is one or other of the places so named in Vavau. [103]

10. Late is a high volcanic island southwest from the main part of the Vavau group. "Clothing for Mua" (the capitol) would be a mat of good kind that was customarily used as a dress for Mua. [133]

11. The poet having finished what he has to say about the mats and cloth of Tonga will now sail to Samoa to collect further wealth. Ulamoleka is still remembered as a very expert navigator, and these lines give him the opportunity to use his knowledge of the stars. The names used, such as Amonga and Tupa (16, pp. 4-9) are star names. The opportunity of direct identification of the stars by their Tongan names seems to have passed irrevocably. Amonga, which is not included in my earlier list, is given by Pratt, for Samoa, as "The name of the stars which form the belt of Orion.' Alotulu seems to be another name for the same stars. A very important part of the equipment of the skillful navigator was the knowledge when to leave one star as a guiding mark and pass on to the next (compare "Then pass on and leave," line 43). These lines may recall a voyage which Ulamoleka and Falepapalangi had actually made in company to Samoa. [502] [821] [502]

12. These lines seem to mean that Ulamoleka was able to keep his boat ahead of Falepapalangi's, probably recalling a voyage they had made.

13. Manuka, or Manua, the eastern part of Samoa.

14. Nafanua was a goddess of Savaii, one of the eastern islands of Samoa. She was the daughter of Saveasiuleo, god of Pulotu (36, p. 38; 26, vol. 1, p. 23). In Tongan myth Nafanua is the twin sister of Topukulu, and the daughter of Tokilangafonua and his sister Hina. Tokilangafonua went to Samoa and thither the twin sisters, who were then joined back to back, swam to find him. Their father on seeing them and not knowing who they were, made as though he would strike them; in their alarm the girls jumped apart and were separated. The girls did not know their father, and in their ignorance both became pregnant to him. Topukulu became the mother of the sea god Hemoanauliuli, and Nafanua, of the goddess Tafakula, of Eua. The lines in the poem would seem to mean that Falepapalangi was to remain in Savaii while Ulamoleka passed on eastwards to Manua, although the preceding lines would imply that they both went to Manua. Nafanua is one of the notable personalities on the way, and they turn aside to honor her, either by an actual going ashore and presenting kava at her temple, or, more probably, by the poet honoring her by remembrance in his verses. 764 539 773

15. Sau and Leiataua are said to be two chiefs in Samoa to whom Tongans used to go for mats. 764

16. The translation of this line uncertain. 539

17. The names mentioned are places in Fiji, which are now called upon to furnish their quota of fit presents. [439]

18. The text at this place is bad and both text and translations are conjectural.

19. I can not find any appropriate meaning for the Tongan word *kouta*, and conjecture that it is the Fijian *nggouta* (strike), though it is doubtful if even this would give an appropriate meaning. [192]

20. The "hidden wealth" is presumably the gift of the bard. Why this should weary him is difficult to see, unless the meaning is that while he had been thinking of mats and cloth for a present the hidden wealth of his muse has been longing to break forth. [538]

21. With the picture of the pigeon not yet properly trained and breaking its [192]

the southeastern extremity of the mound, the strata visible above the sand 172 beach, 1 to 4 feet thick, consist largely of kitchen midden refuse. An excavation 172 10 feet long, 4 feet wide, and 4.2 feet deep, was made at what promised 121 to be the most productive part of this section of the bank. The trench extended 0.9 foot below the upper beach line and 0.7 foot below the present beach surface.

The deposit was horizontally stratified, cross-bedded, and uniform throughout. In 172 it were embedded several earth ovens, intrusively present, lined with coral rock and averaging not more than 3 feet in diameter or 1 foot in depth. The bottom of the deposit rested rather abruptly on a natural base of clean beach sand. All the material in the mound was examined both in situ and after removal, and was finally screened.

The top of the formation produced (a) modern refuse such as bits of rusty barrel-hoops, bottle glass, fragments of copper sheeting, iron, brass, and copper nails, a detachable pearl-shell button, (b) food refuse including marine shells and bones of small animals and fish, some of them showing artificially cut surfaces, and (c) refuse from the ovens, an appreciable quantity of burnt coral rock. The metal and glass objects were plentifully present down to a depth of 1.7 feet; at greater depth they were markedly rarer and mixed with marine shells showing used edges and points—markers of a more primitive culture. Detached canals from a univalve, called *ongaonga* (*Pterocera sp?*), with points bearing evidence of use, and pieces of artificially cut shell were present. At a depth of 2.5 feet, more shaped and work-worn shells were encountered and the debris was entirely free from metal, glass, or any other articles indicating European contact. A fragment of a smoothly shaped and polished bone thatching needle was found 3 feet from the surface. Below a depth of 3.3 feet, no artifacts or other articles indicative of human occupation were found. A few marine shells and fish bones were present, and small quantities of charcoal, such as might be included in any beach deposit. Most of the material examined is of very recent deposit. The metal [439] and glass fragments might well date back to the visits of Cook (1773 and 1777) (4, vol. 1, p. 263) and Labillardière, who, 20 years later, conducted a trading station on Pangaimotu, exchanging nails, pieces of iron, and glass bottles, as well as more perishable materials, for food supplies. The pearl button, found 1.4 feet below the surface of the mound could be replaced from the stock of mercantile houses in present-day Tonga.

The midden from top to bottom reveals a gradual decrease in European articles and a corresponding increase in native artifacts, or possible artifacts, excepting the bottom strata, where no artifacts were encountered. In view of the facts that the site is in close contact with the center of European influence in Tonga, and that the Tongans have been using European implements for a century, the absence in the lower half of the midden of any trace of European material culture is significant.

It is to be concluded, then, that the upper strata are of undoubtedly recent age, while the lower strata show no evidence of other than a primitive culture. The presence of the fragment of thatching needle indicates that this was a typical Tongan culture. It would appear that in Tonga a very thin deposit of refuse materials may include strata bearing both very recent and prehistoric remains.

be allowed to pass or repass to excite any alarm. 175
Having placed every thing in a state of preparation,
a chosen band proceeded in search of the spot 669
where Dugonagaboola slept. They founed all his 726
attendants asleep, but were afraid to slay any one,
lest they should mistake the person of the chief and
give the alarm. At length he was betrayed by the 175
perfumeded oil on his head. This oil is scented 303
with wood brought from the Feejee islands, not far [439]
distant from Tonga. The wood is rubbed or scraped
into a kind of saw-dust, with a rough fish-skin;
with this the oil is mixed, and strained, and then it
possesses a strong perfume. This is used only by the [302]
principal chief. Discovering him by this distinction, [565]
they murdered him, and seven or eight of his 175
attendants. This gave the alarm, and the rest fled; 669
but as every road was beset, many of them were 726
killed also. The conspirators then proceeded down
to the water, and seizing as many canoes as they
needed, broke all the rest, to secure themselves from
being pursued during the night.

By the next morning, the alarm was spread through great part of the Island, and multitudes flocked to Mulkaamair with the particular friends of Dugonagaboola, to inquire into the cause of the outrage, and to rouse him to revenge the death of the chief, on Loogolala. The people of Aheefo, which was the particular district of Dugonagaboola, warmly took up the cause of their chief; and hasti-

262 [226] half of its meals. Women in the other households were apparently not prepared or not able to spend any or much time on the reef.

[252] The staple fruit for all households at this time of the year is papaia, generally eaten after being baked in an oven. Oranges are beginning to ripen at this time but the villager is barely interested in them. Ripe bananas are reserved for [439] [434] feast-occasions and for possible export in order to increase the money-income of the household. One family in the village raises pineapples, but these are for export only.

Chicken and pork figure but rarely in the day-to-day diet. They are reserved for feast-occasions. The average villager probably eats either or both about once a week or even more occasionally, depending upon the frequency of feast-opportunities.

264 178 Formerly, food was always eaten outside of the dwelling or sleeping-house. Today, this is still general practice. People eat in the cook-house, or under raised sun-shelters, or in the open air. Some few of the villagers, however, will sometimes serve a special feast inside the dwelling-house. There appears to be no particular reaction to this on the part of their guests although their forefathers of not many generations back would surely have felt horror if invited to enter a dwelling-house and there eat food.

262 264 121 114 In his study of the psychodynamics of Marquesan society,[13] Kardiner uses as one piece of evidence for the existence in the Marquesas of food-anxieties the fact that "notwithstanding the adequacy of techniques of and organization for production . . . there is first of all an overvaluation on eating itself, the emphasis falling on bulk and not on quality." Whatever the value of the other evidence that Kardiner adduces (cannibalism, *tapu* surrounding eating and cooking, etc.), one is inclined to suspect on the basis of this Tongan material that the facts of quantity-eating must be used with great caution when applied to a Polynesian people if inferences are to be drawn regarding fundamental food-anxieties in a Polynesian culture. In the first instance the Tongan tends to eat but one major meal

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[13] Kardiner, A., *The Individual and His Society*, New York, 1939, 220.

434 Some further notes may be added concerning Biukala's
511 expenditure. His poll-tax payments include his own as well
592 as those of a man from the island of Uvea who has taken up
residence in his household and who assists in turn with
[651] gardening and copra making. The rents are for three *api*
[429] in Pangai and a fourth in Tongatapu. Church gifts include
[794] the quarterly offering of 6/-, together with a special
missionary offering of £2 0s 0d and the gift to the church of
a can of kerosene. Biukala, obviously, is a very strong
functioning member of the church. For the first birthday
[527] of his only son to whom Biukala is greatly attached, the
father made a large feast. Besides large quantities of
Tongan food (including an additional pig which had to be
purchased), Biukala bought from the store such foods as
flour, sugar, fish, spices (his wife has learned to bake cakes),
melons, canned milk. He also bought as a birthday-gift for
his son a fathom of piece goods to make a *vala* for the
infant. This birthday-feast in consequence, is remembered
as one of the really big village functions of the year. The
[432] other store expenditures of these months include the usual
soap, kerosene, flour, sugar, canned meat, canned fish, and
piece-goods for *vala* as well as seeds for his garden.
[431] Biukala's mother lives on a town-lot in Nukualofa. Here
money economy is much more important than in Pangai, and
his substantial gift was doubtless of great value to the
mother.

434 It is not possible to estimate with any accuracy the total
income of Pangai village as a whole. Money is obtained
439 principally from the sale of copra, bananas, and pineapples,
and from services. Of these sources, copra sales are highest on the list, sale of bananas second, the sale of pineapples and services (stevedoring for one or two men, occasional work in a store), far below the others. Some few men in the village make a point of being vitally interested in banana exportation. Each of these men tries to prepare from eight to ten cases of bananas for export about five or six times each year. He receives from three to five shillings per case, depending on market price. About five other men in the village occasionally export one case of bananas each. Thus, under the most favourable conditions, each man in the first group may add perhaps £10 to his yearly income and each

of the second group anything from 10s to £1 per year. 434
Owing to various factors governing the export of Tongan 439
bananas, not only from Tonga as a whole, but also from
Vava'u in particular, these "most favourable circumstances"
are more often conspicuously absent than inconspicuously
present.

Two trading-stations are maintained in Pangai. They 439
are owned by two of the trading-stores in Neiafu. The 443
storekeeper of each station lives in Pangai. He draws a 434
small monthly wage and is responsible for cash-sales at the
station as well as the buying of green copra at prices set by
the Neiafu principals, and the drying of this green copra on
the station drying platforms. In 1938, according to figures [433)
supplied by the Neiafu owners of these two village-stations,
about 115 tons of copra were produced by Pangai village.
This was valued according to prices then ruling at about [435)
£430. The total village-income from copra production for
that year was therefore about this sum. Again, according
to figures given by the trading-stores, the cash sales for the
year 1938 made by these two Pangai stations totalled just
over £306.[15] This last figure does not, of course, cover the
total store expenditure of the Pangai people. Some few of [574)
them occasionally go to Neiafu to visit friends or relatives.
They then take the opportunity to spend what cash they
have available in the larger stores where they can gaze upon
shelves and shelves full of merchandise and groceries to their
hearts' content and for the consideration of some minor
purchase.

The two village-stations give credits according to the 443
discretion of their managers. That this involves risks and 452
necessitates good judgment is suggested by the fact that 437
during the auction of the stocks and assets of one large
store in Neiafu that had closed down, more than £1,000
worth of book debts were sold for £5. The opening bid was

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[15] From the viewpoint of personality study we would still be [124)
interested to know why the Tongan manager of one of these village-stations produced at our request, and after the most herculean labours, an itemized account of store sales which purported to show that his store did a cash-business of well over £1,000 for the year 1938 when the books of the European owner of the business showed cash sales of £146! Very likely our good Tongan friend was dreaming of the day when he was going to be the owner of the largest store in Neiafu.

14: Thomson G-3 (1886-1891) 1894
OU9 Tonga OU9

578 persons" had been endeavouring to set my native col-
leagues against me, and they were so demoralised by the
turn affairs had taken that they talked freely of resigna-
[651] tion. There were, in short, rumours of wars everywhere,
and not a shilling had been taken as taxes since the High
651 Commissioner left a month before. A little later I heard
439 the other side of the story, which was that an enterprising
436 copra-trader had persuaded the native Premier to proclaim
that the Government would accept copra in lieu of money
for taxes, and to sell the copra thus obtained to him at a
fixed rate; and Tukuaho, being new to the business, had
been easily persuaded that the offer was disinterested, and
had acted upon it, to the great indignation of the rival
traders and the detriment of the Government, as will be
explained hereafter.

But the worst news of all, although the least unexpected,
793 was that the Free Church ministers were up in arms.
798
795 They felt, naturally enough, that in Mr Baker they had
[797] lost a powerful champion, and that the Government was
no longer to use its machinery for the annoyance of their
adversaries, the Wesleyans. The return of the exiles was
a triumph for the minority, for among them were the only
persons of rank who remained faithful to the old Church.
[797] Mr Baker was their prophet and their *defensor fidei*, who
alone could keep alive the spirit of enthusiasm, and insure
the punctual payment of their salaries from the annual
[618] mission collections. Naturally enough, therefore, they
"talked *lotu*" from their pulpits—that is to say, they vili-
fied the rival sect, and hinted that the removal of Mr
Baker was but the preface to the seizure of the country by
186 Great Britain. Now every Tongan is hysterically patri-
829

14: Thomson G-3 (1886-1891) 1894
OU9 Tonga OU9

565 troubles were at their worst in 1886 Nuku held a *fono*,
646 and thus addressed his people:—

565 "All the great nations of the earth have made treaties
646 with Tonga. We have a treaty with Germany, a treaty of
829 mutual love and respect. We have a treaty with France: this is for the mutual protection of religion. We have a treaty with America: this is to secure freedom of trade, so that a Tongan may go and sell things in America, just as an American may come and sell things in Tonga. And we have a treaty with Britain, but *that* is a very different thing: Tonga and Britain are like two cocks, each standing on his own dunghill, trying to raise his head above the other and crow him down!"

645 The *fono* at Nukualofa was held at sunrise, and I was
621 awakened by an excited policeman who came to say that
208 chiefs and people were assembled and waiting for me.
203 Launched hungry, sleepy, and uncomfortable upon an audience tired of waiting, I did not make a brilliant speech.

By holding these *fonos* we had now done all that lay in our power to hasten the payment of taxes pending the
651 arrival of the king from Vavau. We were in great straits
652 for want of money, for we had undertaken to pay the salaries regularly from the day on which we assumed office, and hitherto not a penny of poll-tax had been taken
[439] at the windows. The Government was being carried on with the Customs dues alone, which, regular though they were, did not suffice to meet the current demands upon
645 the Treasury, exclusive of salaries. But we could do no more, and it was high time to agree upon the line of policy to be pursued to promote unanimity among our-

181 able than the mission primness of the Tongatabu maidens,
whose discreet deportment invites suspicion.

245 From the wharf one climbs a grassy slope, and straightway
one is in the orange-groves. The whole town is an
orange-garden. Beneath the dark shiny foliage lie piles
of rotting fruit, half-concealed by the rank couch-grass.
Some of the trees are bent with their green load, others
are white with blossom, for the crops succeed each other
342 with little intermission. Behind the long rows of trees
nestle the brown thatched houses, set down, as it were,
upon the grass like the toy cottages of a child.

133 There is no beach here. The shores of the inlet are steep
to, and the main road runs along the edge of the cliff.
344 On this road stands the "Palace," a barn-like decaying
structure of wood, from which the paint has long ago been
[352] washed by successive rainy seasons. Poor Laifone maintained
[513] the place with magnificence,—that is to say, there
[264] were marble mantelpieces (never paid for), cut-glass decanters,
china, plate, whips, walking-sticks, boot-trees,
ornaments, and saddles scattered in heaps over the furniture
and floors, very dirty and in indescribable confusion;
while the royal master of all this luxury slept on the floor,
ate his meals with his fingers, and drank his liquor simply
from the black bottle without the intermediary of a cut-glass
decanter. But now even those glories have departed,
and the house is empty except when the king pays a flying
366 visit to Vavau. Beyond the "Palace" were the stores,
[439] built on the seaward side of the road for greater facility
in shipping copra, which comes next to oranges as the chief
563 product of Vavau. These stores, kept by rival traders
441 struggling for the custom of the passing Tongans, breed by

646 to move that the Speaker do vacate the chair, and were
deaf to the entreaties of members who had discharged
one wordy flood and longed for a Committee of the House
to reopen the sluice-gates of their eloquence.

646 The best speakers in the House were Manase (not the
537 Governor of that name) and Sovea of Vavau. The former
was nervous, impulsive, and given to the display of
rhetorical fireworks; the latter, a cool keen debater,
with a logical mind and an inconvenient habit of asking
646 questions. He had served through the last Parliament,
and was credited with knowing all the weak spots in
the Government armour. In person he was an insignificant
little man, disfigured by bad teeth. He sat by himself
at the extreme end of the House, and a compact
body of members from Vavau and Haapai, his admirers,
separated him from the rest of the Commons. He proved
to be a far more dangerous opponent than the generous
646 Manase, whom we soon won over to our cause. The
578 chief grievance of the Vavau contingent was the predominance
645 of Tongatabu chiefs in the Cabinet, and the
favour which the present Cabinet were alleged to show
[563] to the Wesleyans. Their discontent had been fostered
[439] by the traders of Vavau, who, in the hope of effecting
[651] a reduction in the Customs tariff, had persuaded them
that the Government was really in the hands, not of
Tongans, but of C—— and myself, and that if there
were no Customs the prices of all important articles
would be lowered. The king had announced that he
did not wish any revision of the Constitution to be discussed
this session. Their mouths were therefore closed
in respect of their principal grievance, and they were

646 party. The Government carried the motion by a bare
671 majority of two. That evening Mataka read it to the
836 king, sitting at the old man's feet. When the fateful
684 words were reached Tubou expressed his disapproval, and declined to sign until it had been taken back to the House for further discussion. The news leaked out, and at the
[643] next division the Ministers were left alone. A Tongan has no convictions that are not shared by his king.

646 These debates were useful to us, for they enabled us to sift the dispositions of the members, and to gauge our chances of overcoming opposition in the more important
646 debate on the Customs. As soon as our position seemed
651 sufficiently secure, we determined to skip the intermediate
439 part of the Code, and at once attack the chapter dealing with the tariff. The announcement was made without warning, so that we might hear the views of the members
[434] themselves without prompting from the Europeans. I told them that the Customs at present produced a revenue of about £6000 a-year, which we could not afford to do without unless the expenditure was considerably reduced; but that before proceeding further with the Code, we must know the views of the House regarding the continuance of the *tute*, as they called the collection of Customs dues. If they refused to raise revenue by this means, it would be a waste of time to pass an elaborate Customs law. There was some whispering amongst the Commons, and William rose to ask a question. If the Customs were abolished, what would happen? To this I replied that the revenue must be raised by increased direct taxation, or by a reduction of the expenditure by one-third. Vili Tai wished to know whether it was

true, as they had heard, that the tariff was heavier in 646
Tonga than in other countries, and that the most pros- 651
perous countries owed their success to there being no 439
Customs at all? I had a list of the *ad valorem* tariffs
showing that Tonga, with a duty of 10 per cent, levied a
lighter tax than New Zealand, Canada, Queensland, or
even Fiji. Then a member from Vavau rose to put the
all-important question whether, in the event of the aboli-
tion of the Customs dues, the prices of calico and kerosene
would be lowered by the storekeepers, as the white men
had promised? At this stage the Speaker joined in the
debate. He remembered the prices of such things before
there ever was a tariff, and he could assure the House
that the prices were not a farthing lower then. He could
tell them what the effect would be. The traders' profits
would be increased, but the Tongans would not be one
whit the better for it. When the question was put, the
House was unanimous in voting for a continuance of the
duties, provided that the laws relating to Customs were
translated so as to be intelligible to them. This proviso
enabled us to complete our victory. We asked the House 646
to nominate a committee of pundits to assist the Govern-
ment in translating the mercantile laws, knowing full
well that we should thus convert our adversaries into
champions of a bill which they had themselves helped to
draft. William, Filimone, and Manase of Vavau were
obviously flattered at being singled out as the Govern-
ment nominees for such a work. For the next fortnight
we met nightly at seven o'clock, and adjourned at two in
the morning, after submitting each clause of the law to
the most careful system of polishing by the entire com-

646 mittee. Every half-hour during the sitting four convicts entered with a full bowl of kava and retired with an empty one, until the air was so charged with tobacco-smoke that they were scarcely discernible. Hearing the disputes over the meaning of every phrase and idiom, I learned more Tongan during that fortnight than during all the rest of the time I spent in the country.

646 651 439 The Government was pledged to the Chamber of Commerce to introduce certain reductions in the tariff which provided some rather vexatious duties on articles little used. As soon as the debate was opened Holio rose. He for one fully approved of the principle of collecting revenue by Customs dues, but he thought it became the Government to be magnanimous, and not to press for duties on the necessaries of life, as, for instance, red wines. (Laughter, and a voice, "Drinking liquor is forbidden.") Holio stopped, disconcerted, and the Minister of Police pointed an accusatory finger at him. "This man," he said, "is speaking the words of the priests. Who drinks red wine but the priests? And yet he has sworn to follow the dictates of his own conscience." Not only did the House decline to lower the duty on claret, but they showed a stubborn disinclination to listen to any of the Government proposals for reduction. In vain we told them that we were prepared to sacrifice revenue to the extent of £400 a-year. 646 651 439 563 The Europeans had overdone their part in declaiming against the Customs, and the natives, sore at having been made the victims of defective arithmetic, were disinclined to vote for any proposal that might appear to be concession to the agitation. The Government was beaten on a division, and was regarded

by Parliament as being in league with the traders, and by 646
the traders as being guilty of the blackest duplicity. The 651
Chamber of Commerce, indeed, with its dying breath de- 439
manded from me why the Government, so ignominiously 563
beaten on so vital a point as the import duty on kerosene,
had not at once tendered their resignation.

The shipping laws were more intelligible to the House. 646
Many of them, as the owners or masters of small craft, 671
had had a bitter experience of the law regarding coasting 505
licences, and a strong party were in favour of exempting
craft owned by Tongans and used only as yachts from
the coasting dues paid by steamers and vessels plying
for hire. But the majority were against enacting any-
thing that might be cast up against them as one-sided
legislation.

Hansard, meanwhile, was growing to unmanageable 646
dimensions. The clerks took down every speech in 212
shorthand, and sat up till daylight night after night
transcribing their notes. Not the smallest spoken word
passed unrecorded. It was time for a brief holiday, for 646
the sick-list was heavy; and many noblemen who could
take the air in native attire could not attend the House
until their feet had sufficiently recovered to encounter
again the penalties attaching to boots. The Speaker an- 646
nounced a three days' holiday, and added that by special 759
arrangement the Government medical officer would pre-
scribe gratis for all members in need of medical treat-
ment. During the morning a dense crowd of legislators
besieged the dispensary. Within was the newly arrived
doctor, heated and gesticulating, trying to drive back the
mob of senators, who were all striving to describe in

643 trade was at a standstill. The people went to their planta-
643 tions only to dig up and carry away food for the great funeral
764 feasts. Their only labour was the erection of the great tomb in
the Malaekula (Red square). Contrary to general expectation,
643 the king's great-grandson, George Taufaahau, succeeded him
[645] without disturbance. This was in a great measure due to the
loyalty and good sense of Tukuaho, who might easily, had he
pleased, have divided the country into factions. The young
king of twenty ill repaid this devotion. For the first few
months, it is true, he followed his Premier's advice. But no
sooner did he begin to feel secure in his new position than he
[764] began to listen to advisers of another kind. The balance in
the treasury had melted away in the expenses of the funeral.
Under the most favourable circumstances, the country could
731 only recover under careful management. But before the people
[164] could return to work, an epidemic of measles, then prevalent in
New Zealand, broke out in Nukualofa. We all know the story
of the measles in Fiji,—how, in 1876, it swept away 40,000 out
of the population of 150,000. Measles, when it attacks the
Polynesians, is no longer the infantine malady we know of. It
[165] becomes a devastating plague. The Tongans, with the experi-
ence of Fiji in their memories, took, it is true, some precautions
against the after-effects of the disease; but, nevertheless, one-
twentieth of the population was carried off, and the remainder
669 was so demoralised that it was threatened with famine. The
measles gave the enemies of the Government the opportunity
they wanted. The infection must have been brought by a
steamer, and the Premier had been responsible for the granting
of pratique. It mattered not that the king had himself sanc-
tioned the hauling down of the yellow flag. An excuse was
wanted for dismissing him, and the king availed himself of it.
669 There was a *coup-d'état.* One morning the European officers
645 of Customs found sentries at their office doors. Tukuaho was
563 439 summarily dismissed without any assigned reason, Sateki ap-
651 pointed in his place, and an unemployed schoolmaster and a

fisherman appointed in the room of the two dismissed Euro- 669
pean officers. These, not content with their triumph, pro- 645
ceeded to audit the Customs' accounts, and declared that they 563
had discovered defalcations. The ex-collector of Customs im- 439
mediately brought an action for wrongful dismissal and slander 651
before the High Commissioner's Court, and, to the great dis- [694]
comfiture of a majority of the storekeepers (what Customs officer was ever loved?), triumphantly cleared his character.

Since then things have gone from bad to worse. The people 651
are less than ever inclined to pay their taxes, now that the Government has no longer the strong arm of Tubou to support it.

I should be wiser if I said nothing about the future; for no 000
man ever yet succeeded in foretelling accurately the shifts and turns of political events. Yet even at the risk of hurting the feelings of my good friends in Tonga, I will state my belief in the hope that it may act as a warning. England does not want Tonga, nor New Zealand either, if she knew her own interests; and yet, even if there were none of those restless spirits that egg on the Governments of our half-populated colonies to extend their boundaries and responsibilities, Tonga must eventually fall under the flag of England or of Australasia. When this happens, it will be the fault of the Tongans themselves. If, instead of hysterical professions of patriotism, the Tongans would show the very moderately patriotic feelings that prompt other peoples to pay their taxes, Tonga might remain independent for generations; but with a weak Government and a divided people, how can a little State, hemmed in by powerful and growing neighbours, maintain her independence? We do not want Tonga, and yet we cannot allow any other great Power to take our place there. If Tonga must be taken, it is we who must take her; but though I am no "Little Englander," I have seen enough of our small possessions to know that the increased incentive to British trade that may result from the hoisting of a flag does not compensate for the weakness that a host of half bankrupt islands throws upon the Empire.

[p. 288 is blank]

Native grown tobacco is smoked in Tonga rolled in 276
pieces of dried banana leaf. These cigarettes seem to be
relished more than imported ready-made cigarettes. Tongan 276
school children are thoroughly grounded in the fact 829
that smoking is an American-Indian invention. Its transmission
to Tonga and the rest of the world they associate
with the name of Christopher Columbus.

Not every foreign trait in modern Tongan culture has 177
been absorbed with as little harm as tobacco. Cricket is 177
one in point. With such fervor was cricket playing undertaken
that it became necessary some decades ago to pass 526
laws restricting the playing of the game to certain days of
the week.

Horse racing, too, is a favourite pastime and even some 541
remote islands now have race courses.

The dynamiting of fish became so prevalent some years 226
ago that it was necessary to prohibit the use of the explosive 178
for this purpose. Fishing has fallen somewhat into abeyance [439]
in certain localities and it is not uncommon for Tongans to
buy fish from enterprising Japanese and Caucasian fishermen.
177

The introduction of cloth has given rise to two new 296
feminine occupations; sewing, often with a machine; and [462]
washing. Tapa, the native substitute for cloth, is unwashable.
Clothes washing was given a further impulse by the 291
enactment of a law compelling all individuals to wear shirts [656]
in public. The lower garment is still the vala or rectangular
cloth worn as a skirt. To-day it is of textile material. Shoes
are not worn except by the well-to-do.

The police costume is of interest; barefeet, white vala, 625
blue or white coat, and broad-brimmed felt hat. 292

Speaking of the vala or rectangular cloth wound about 291
the waist as a skirt, it should be noted that the proper
length for a gentleman is half-way between the knee and
ankle. Shorter valas are worn by cooks. In Samoa valas
are worn short. I once heard a Tongan chief remark derisively 186
of the Samoans that "they wear their valas like
cooks." I have also heard the Samoans spoken of as barbarians [514]
because they have no water closets, which in Tonga [656]
are required by law.

Tongans eat with their fingers seated cross-legged on 264
mats with the food before them on other mats. Europeans

at Tongan feasts do the same. The combination of Euro- 264
pean dress and fingers for knives, forks and spoons seems
strikingly incongruous to one new to the custom. At the
end of the meal a basin of water is passed around, so that
each one may wash his hands.

Perfumes are much appreciated by the Tongans and 302
traders say that they discriminate between the cheaper and
the better grades. This is clearly but a transferal of their [178]
old interest in perfumed coconut oil, with which they still
freely anoint themselves.

European alcoholic drinks are called kava papalangi 273
(foreign kava). They are permitted only to the land-hold- [656]
ing chiefs, in a limited quantity, and to foreigners. Com- [565]
moners must go without.

Stone, bone, and shell implements have been supplanted 177
long since by metal implements. Contact with Euro- [41]
American culture has resulted, however, in the rise of a new
stone implement. This is the slab of stone and the stone [415]
pounder for preparing kava root. Formerly this was chewed [276]
to prepare the brew; now, owing to Caucasian influence, it
is pounded.

The former narrow roads that traversed the various 491
Tongan islands have now all been replaced by roads of 178
standard width for wheeled vehicles. The commonest vehicle 493
is a two-wheeled cart imported from New Zealand. The [439]
Tongan usually dispenses with the board seat and sits cross-
legged on the bed of the cart. In the two large islands of
Tongatabu and Vavau automobiles have made their appear-
ance. They are the more numerous in the former island
where the levelness of the country makes for ease in driving.
The majority of cars are driven by Caucasians, but the Ton- [177]
gans are fast learning. Many Tongans have been familiar 501
for years with gasoline launches.

Vehicles keep to the left in Tonga. 494

Many Tongan houses show a hybridism in construction. 342
Often the roof will be of corrugated iron instead of the re-
gular thatch. Or again, the sides and rounded ends will be 177
of boards instead of cane. These innovations usually do not
affect the shape of the house. Many churches are in native 346
architecture, which employs sinnet cord instead of nails. 178

Appreciation of money is naturally developing in Tonga 177
and is undoubtedly an important factor in the process of 436
acculturation. National feeling, though probably existent 186
178

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000 It has to be recognised, however, that the development of animal husbandry in Tonga on any satisfactory basis would be a big job, requiring government action and expenditure. Lack of water is a difficulty and to overcome it would involve sinking wells on an extensive scale. Fencing would also be required, along with suitable grasses and legumes for feeding. Measures would have to be instituted to control diseases, stud animals imported to improve the poor quality of the present stock, and popular education provided in the care and use of animals. Such a programme would be by no means a Utopian venture, since Europeans have shown that cattle can thrive in Tonga, and since there is every reason to believe that a flourishing animal husbandry would not only do much to improve diet, but would also have valuable repercussions on agriculture itself.

The Future of Agriculture

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185 A few years ago the Director of Agriculture was moved by the deficiencies of Tongan farming to draw up an interesting and very valuable report in which he made excellent suggestions for improvement. As general measures he advocated the institution of an experimental farm (with a laboratory attached), and a greater agricultural bias in education. The experimental farm would be used for testing and distributing new crops and for improving plants and seeds. Livestock problems could also be studied, and assistance given to farmers in raising stock. In regard to education he recommended a revision of the primary syllabus, and also the establishment of an agricultural college. Specific measures were also suggested for improving existing industries. The quality of copra could be raised by forming village co-operatives to run hot-air driers, and by setting up a Copra Board to impose grading standards. State assistance in providing fencing [439] and watering facilities would develop animal husbandry, while the establishment of an abattoir, ham curing works, and butter factory would give Tongans the meat and butter they have either to import or do without.

The Director was interested not only in developing existing industries but in opening up new ones. Experiments had shown that peanuts could be profitably grown, and that tapa cloth could find an export market. Records proved that cotton and rice could be grown in Tonga, and money spent on experimenting with these crops might well lead to new products for home consumption and export. Systema-

tic cultivation and the adoption of proper curing methods could lead 654
to a more plentiful and superior supply of tobacco, and might even 647
give the country a new export. Export markets might also be found 185
for corn, hemp, ginger, chillies, candlenuts and kava.

One or two secondary industries might also be developed. If cotton proved a practical crop, a cottage weaving industry would be a distinct possibility. Silk might be developed in the same way, since mulberries
flourish in Tonga. Sugar cane flourishes too, yet no attempt has been [257]
made to extract sugar, which is imported from Fiji. A small industry [439]
could provide all the sugar the country needs, and the buffalo mills employed in North Borneo might prove suitable for this purpose.
The Tongans take great pride in personal cleanliness, but cannot afford [515]
to buy much soap. There is always plenty of copra: a livestock industry would ensure ample tallow, and the country would both increase soap consumption and save foreign exchange by setting up a small soap factory.

Mr. Cottrell-Dormer made a rough estimate of the cost of his complete scheme over the ten years he considered necessary to establish
it firmly. His figure was £100,000, or less than half the amount of the [652]
Kingdom's foreign investments. So far the War and other difficulties have prevented much being done to realise its very attractive possibilities. There have been recent attempts to reform agricultural education, but apart from them the only important step has been the Agricultural Organisation Act of 1940.[3]

The Director's scheme shows that much can be done to improve 241
Tonga's farming, its export trade and its standard of living. The 185
Agricultural Organisation Act, even if it is still in the initial and tentative stage of administration, shows that the government is conscious of the need for such improvement, and is prepared to do something about it. The institutions already set up have made a good start and

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[3] This Act sought to encourage planting, to promote co-operative effort, and to control the [474]
marketing of export products. Local Producers' Associations are to be set up,
under the leadership of the town officers, with the general object of improving farming, [439]
and for such specific purposes as the acquisition and operation of hot-air driers. At the same
time four export boards have been established. The Banana Board has already achieved an [241]
improvement in the quality of banana exports by making inspections more thorough, and by
insisting upon the use of knives for harvesting. It has also encouraged the use of locally made
cases. The Copra Board is now the sole purchaser of copra and has already secured improved [435]
export quality by introducing differential prices according to grade, and by refusing to purchase
green copra. These authorities are all subject to a Council of Agriculture which co-ordinates [647]
their functions, and which gives them financial aid from an Agricultural and Industrial Development Fund, established by a government loan of £1,000. The Council also acts as an advisory [652]
body to the Minister of Agriculture.

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241 can develop into important agencies for the country's economic
185 development.

241 Tonga differs most from other Pacific island groups in that European
423 planters play an insignificant role in its agriculture. It has been the
[185] studied and consistent policy of the government to prevent the development of European plantations and the consequent growth of a native
[563] proletariat. No one can buy land in Tonga, and leases to Europeans are severely restricted. Less than 1,700 have been granted, and nearly all of them are for commercial or residential sites. Only 24 are for agricultural purposes, and none for an area of more than two hundred
[563] acres. These small plantations rely for their labour upon the 350 Solomon Islanders and Fijians resident in the Kingdom.

TONGAN TRADE

438 Commerce, particularly monetary commerce, is unimportant in a
438 land of subsistence farmers. Tonga has a considerable trade in such local products as livestock, fish, vegetables, fruit, baskets, mats
437 and tapa cloth, but it is largely unorganised and mostly on a basis
437 of barter. The Tongan needs money for few purposes other than to pay his rent and poll tax, to subscribe to his church, and to purchase
436 a few imported articles. The comparative unimportance of monetary
● [439] transactions is shown by exports per head amounting to only £2·9
[651] in 1938, imports per head to £2·4, and native taxes per head to £0·2.[*]

439 Imports, indeed, play a very small direct role in the Tongan standard of living. Nearly a quarter of them consist either of producers' materials —copra sacks, banana shooks, timber, cordage, and rope—or of goods which are largely for European consumption—tobacco, beer, spirits,
[511] automobiles and benzine. The significance of the imports that enter

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[*] Statistical summary of Tonga's Foreign Trade (Tongan Gazette).

Year	Copra Exports	Average Price of Copra	Bananas	Other Exports	Total Exports	Total Imports
	£A	£A per ton	£A	£A	£A	£A
1933	105,028	9·2	—	9,419	114,447	86,007
1934	59,941	5·9	—	18,901	77,842	48,526
1935	79,003	6·6	—	11,708	90,711	68,782
1936	105,078	8·8	—	11,461	116,539	92,296
1937	158,133	13·1	4,128	2,359	164,620	137,365
1938	90,398	7·3	3,507	4,558	98,463	82,795
1939	64,545	6·1	12,026	3,249	79,820	79,696
1940	43,896	6·0	12,905	5,474	62,275	76,360
1941	25,548	6·0	24,179	6,732	56,459	71,943
1942	89,771	11·0	26,043	4,574	120,388	144,110

into Tongan consumption is shown by the following list of per capita 439
expenditures in 1938: Biscuits 11d; Butter 8d; Drapery 6s. 4d; Flour 511
4s. 9d; Tinned meat 4s. 7d; Soap 1s. 3d; Sugar 1s. 9d; Kerosene 1s. 0d. (est.). A typical household probably spends about £6 a year on store goods, but it should not be thought that this modest outlay reflects satisfaction with the Tongan standard of living. The people are eager to buy imported commodities, particularly drapery, tinned meat and kerosene, but are severely restricted in their purchases by low cash incomes. Imports always respond closely to exports, and exports 439
depend overwhelmingly on the price of copra. 435

Copra has always been by far the most important export, and during the last twenty years it has been Tonga's misfortune that copra prices have fluctuated about a steeply declining trend. In the decade after 1924 they fell from £20·5 a ton to £5·9, recovered to £13·1 in 1937, but fell again to £6 in 1941. As a result export income shrank 439
from about £270,000 a year in the early 'twenties to £104,000 in the 434
late 'thirties. The Kingdom's dependence upon this erratic and precarious source of income has been relieved by a growing export trade in bananas which began in 1932 when the New Zealand government allotted banana quotas to the various island groups, and gave Tonga 20 per cent of the Fiji quota. In 1938 shipments amounted to 11,000 cases for a return of £35,000. Since then the quotas have been lifted [435]
and the New Zealand f.o.b. price raised from 7s. to 9s. a case, with the result that Tonga exported £36,000 of bananas in 1942. Bananas 439
now account for a quarter of Tonga's exports, and it is to be hoped that this valuable and stabilising addition to export income can be retained. It will be if Tonga is allowed to keep its present share of the New Zealand market.

Direction of Tongan Trade

The Director of Agriculture has tried to diversify exports further 439
by developing a trade in peanuts and tapa cloth. After testing various 654
seeds he succeeded in establishing a small production of peanuts and [244]
in disposing of them in New Zealand. Twelve tons were shipped in 439
1942 at the satisfactory price of £30 a ton. A strong local demand [435]
developed, however, with the arrival of Allied troops and killed this promising export trade. A market was found for tapa cloth in Britain [435]
which took forty-four tons in 1941 at a price of £20 a ton, but exports ceased when the spread of the War to the Pacific created insuperable

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439 shipping difficulties. These setbacks are probably only temporary, and
000 Tonga can look forward to developing a modest, but useful, trade in
both peanuts and tapa after the War.

Apart from them the only likely addition to the export trade is
439 fruit. Before the Great War Tonga had a profitable fruit trade with
New Zealand, but in 1941, an exceptionally good year, it amounted
[434] to less than £2,000 worth of pineapples and melons. Tonga produces
excellent qualities of these fruits; the only problems are transport
and markets. New Zealand could well afford to extend a little generosity
to Tonga in regard to markets, especially as New Zealand
exports about five times as much to Tonga as it imports.

652 During the present century Tonga has built up considerable overseas
investments out of its trade surpluses. Since Tonga has no foreign
debts its investments place it in the select coterie of creditor nations,
with foreign assets equivalent to four years' normal revenue. This
exceptionally liquid position is necessary to a large extent since the
country's money income depends so largely upon the vagaries of the
copra market. There is, nevertheless, a definite anomaly in this small
and economically backward nation lending nearly all its savings to
000 wealthy countries like Australia and New Zealand. It is impossible,
in view of the Director of Agriculture's very specific proposals for
economic development, to believe that there are no avenues for sound
investments in Tonga, especially as some of the developments suggested
would lessen the need for large overseas funds by reducing the country's
dependence on imports.

HEALTH

164 The standard of health is rightly considered a major test in judging
the efficiency of a native administration. That the Tongans are basically
healthy can be seen from their fine muscular physiques, and confirmed
by their moderate death rate and their satisfactory rate of natural
163 increase. During the five years 1934-38 their birth rate averaged 3.82
165 per cent, their death rate 1.41 per cent, and their rate of natural increase
161 2.41 per cent. These figures compare very favourably with those for
Fiji, American Samoa, and for the New Zealand Maori. There are
165 no figures available for expectation of life but the Tongans are decidedly
not short-lived. There are plenty of old people, including a few
centenarians, while senility is listed as causing about one-eighth of the
[164] total deaths. Tuberculosis, which accounts for about a fifth, is the

249 inducement to cultivate the *To* to any great extent. When they have attained this knowledge, they will readily find an open market in the Australasian Colonies for all that they can produce; and thus another source of national prosperity will be opened up which at present lies undeveloped.

•245 The coffee plant was introduced only a few years
[137] since, (1852,) and has succeeded well. The plant
grows rapidly, and bears profusely. The beans are
large, and of good quality. King George himself
[643] has devoted considerable attention to its cultivation,
and, in due time, it also will become a valuable
addition to the exports of the land.

The natives, we may here remark, do not fail to
245 magnify, in an extraordinary manner, the value of
435 anything new that may be recommended for culti-
177 vation, either by Missionaries or other foreigners.
They seem to fancy that whatever the white man
likes, and pays attention to, must be "*koloa lahi*,"
great riches. Even coffee beans have awakened
mysterious notions of value, in some native minds,
as the following incident will show. A woman
245 belonging to the island of Haano, in Haabai, came
435 from thence to Lifuka, a distance by sea of about
•439 twenty miles, in a small canoe, for the sole pur-
pose of bartering at our Mission station, what she
[505] thought was a very valuable thing. Presenting
herself before us, she took from her bosom a small
piece of white native cloth carefully tied up and
tightly knotted. Thinking, from the appearance
of the package, and the manner of the woman,
that she had brought some pearls for sale, we
desired her to show them. With due deliberation,
the package was unfolded, when, behold, it dis-
played just half-a-dozen coffee-beans! It would

245 435 439 be impossible to depict the air of utter disappointment, mingled with lingering incredulity, which the woman's face betrayed, when a large canister of coffee-beans was placed before her, accompanied by an explanation of their true value. Upon inquiry, we leant that she, and her wise lord at home, having heard of the new and valuable plant, secretly obtained one, and after tending it carefully, they thought to make a good thing of it, by taking its first fruits for sale to the Missionary. Considering the poor woman's ignorance, as well as her simplicity, and also the blank disappointment that met her, after such a long journey, we gave her a small present, as an encouragement to further cultivation of the plant, but sent her home with wonderfully altered ideas respecting the costliness of the coffee-bean.

244 The yam, or native *ufi*, (*Dioscorea alata*,) includes a great variety of this most valuable of all the edible roots of the tropics. [262] It is the chief article of vegetable diet raised by the Tonguese; and, probably, it is cultivated in no other region to such high perfection or in such quantity.

[171] The Tonguese do not believe at all in the Fijian practice of putting yam settings into hard and unprepared soil; nor, indeed, are the Fijians themselves uniform in their mode of cultivating the root. The plan adopted in Tonga involves great care and labour, but is rewarded by large crops of the most valuable esculent root to be found in the world.

After the surface of the ground has been thoroughly cleared of bush and weeds, the first part of the operation is that of digging the yam-pits,' or *bukes*. These are dug of a diameter

quarter to which the eye may be turned, the land 245
appears clad with their graceful foliage, down even to within a few feet of the sea itself. Proximity to the ocean, and a sandy soil, appear rather to favour than to hinder the rapid and healthy growth of the tree. Some of the finest and tallest specimens are met with on the shores of the lowest islands. In such situations they attain an elevation of eighty and even ninety feet. Hence an approaching voyager discovers the tufted heads of these palms in the distance, long before the land itself, upon which they grow, becomes visible.

The natives reckon at least nine different kinds of cocoa-nut trees, for all of which they have distinctive names, such as, the *niu-kafa*, *niu-ui*, *niuleka*, &c. All these are known and included under [114]
the generic name of *Niu*; so that Dr. Seemann appears to be in error when he says, that "the Fijians are the only people who in their barbarous state had a collective term for the great natural order of palms." *

In addition to the multifarious uses to which 439
every portion of this tree has been devoted, from 434
time immemorial,† the natives now derive from it [824]
a large revenue of wealth, by the manufacture and
exportation of cocoa-nut oil. Nothing of this kind 439
was done, of any importance, before the year 1846. 434
At that time the Missionaries adopted various mea- 799
sures calculated to encourage the manufacture of the article, and to facilitate its sale to resident foreign traders. They also explained the duty incumbent upon professed converts to the Christian faith, and especially upon all members of the church,

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* Dr. Seemann's "Viti," p. 367.

† Ellis's "Polynesia Researches," vol. i., pp. 50-59. [113]

22: West M-3 (1846-1855) 1865 OU9 Tonga OU9

439 434 797 of personally contributing to the support and extension of missionary agencies. These measures resulted in the commencement of a commerce that has since reached considerable dimensions, and still continues to extend every year; while the native churches now meet the total expenses of the Missionaries, Native Ministers, and religious institutions amongst them. The islands have also been [648] brought thereby into much closer, and more frequent, intercourse with the Australasian colonies of Great Britain.

258 433 The present mode of making oil is both rude and wasteful. With proper machinery, double the quantity of oil could be obtained from the same number of nuts now used. By the present native system from sixty to seventy nuts are required for every gallon of oil: whereas by the use of suitable machinery one gallon can easily be obtained from only thirty good oil-yielding nuts. Some persons very competent to judge, have not hesitated to say, that this quantity can readily be expressed from even 000 twenty nuts. But, be this as it may, the value of a plantation of cocoa-nut trees, properly attended to, may soon be calculated: and, where the nuts of this prolific palm have been allowed, hitherto, to perish on the ground by millions every year, there must certainly be a good opening for European appliances and industry. The estimated produce of a full-bearing tree is from ninety to one hundred nuts per annum. A plantation therefore, of a few thousand trees would yield a good income. Already several of the residents, who, in by-gone days, landed on the shores of these islands, destitute wanderers, have, through the assistance of the Missionaries, and by the development of this

22: West M-3 (1846-1855) 1865 OU9 Tonga OU9

ever, on sending several men to different points round the coast, it was soon discovered that those in charge had been compelled to take shelter, during the squalls of the night, in another locality than that where we landed. With considerable difficulty, and even danger, we got on board, and gladly bore away for Lifuka, where we arrived before dark, but thoroughly exhausted by the day's exposure to a vertical sun.

November 7th, 1854.—The Mission brig, after returning from Fiji, remained here about three weeks, taking in cargo for Sydney. The shipment consisted, in part, of native Missionary contributions, in cocoa-nut oil, to the value of several hundred pounds. She sailed to-day, having on board the Rev. R. B. Lyth, Mrs. Lyth, and family. Mr. and Mrs. Lyth have laboured for eighteen years in this part of the world; the first years of their Mission life having been spent on this island of Lifuka, and the remainder in Fiji. The day has been wet and stormy. We are now left again to our usual loneliness, after three weeks of pleasant and profitable intercourse with our friends. I have had a good deal of important conversation with Mr. Lyth on the present state and prospects of our work, both here and at Fiji. We are of one opinion on the question of native agency. We consider that this ought to be the engrossing subject, in relation to these Missions, at the present time. We are not likely ever to have such a number of European Missionaries, as would be required for the churches of these numerous islands. Nor would it be desirable, even if possible, to exclude the purely native element from the ministry of this or any other country. But if even the less important districts,

28: Buck D,E-4 (no date) 1941 OU9 Tonga OU9
Samoa OU8

more reed and the longest reed has extra length below the closing node (fig. 4, *b*). The two drawings were made from opposite sides which may confuse the reader at first glance.

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Another pan-pipe in the British Museum figured by Edge-Partington (2) and attributed to the New Hebrides is shown in fig. 4, *c*. Two other New Hebrides pan-pipes in the Peabody Museum, Salem, with nine and eleven reeds respectively, show the same regular grading of reeds and a similar lashing in one row with the herring-bone pattern.

Edge-Partington, in a note to his drawing of fig. 4, *c*, states that the reeds are "fastened together with strips of leaf." In some modern pan-pipes in the Bishop Museum from the New Hebrides with three rows of lashing similar to the Tongan technique, the lashing-material consists of strips of the separated upper surface of pandanus leaves. It is probable that pandanus leaf is the leaf referred to by Edge-Partington for though techniques may alter somewhat, people are likely to adhere to the local raw material used by their elders. If another test were required to disprove the New Zealand locality of the pan-pipe attributed to it, the absence of New Zealand flax fibre as the lashing material would be significant, but the presence of pandanus leaf would be conclusive evidence as the pandanus is not present in the New Zealand flora. However, the use of bamboo reeds is conclusive enough. From the evidence, it is clear that pan-pipes were not used in New Zealand and the specimen in the British Museum attributed to New Zealand belongs to the New Hebrides.

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CONCLUSION

Pan-pipes are widely spread throughout New Guinea and Melanesia, but in Polynesia they occurred only in Tonga and Samoa, two groups in closest proximity to Fiji, the eastern outpost of Melanesia. Tonga, Samoa, and Fiji form a triangle within which frequent inter-island communication and trade took place. Tonga traded with Fiji for red feathers, sandal wood, and logs for building double-canoes. Even Fijian craftsmen were imported into Tonga to build the Fijian type of double-canoe. This form under the name of *kalia* displaced the older Tongan type termed *tongiaki*. Samoa also traded with Fiji for red feathers and like the Tongans adopted the later double-canoe with its dialectical name of *'alia* in place

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28: Buck D,E-4 (no date) 1941 OU9 Tonga OU9
Samoa OU8

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439 of their older *vaka tele* that corresponded to the Tongan
171 *tongiaki.*

177 In addition to trade which spread material objects, inter-
T marriages took place between the three groups, and certain
S social customs such as brother-and-sister avoidance and the
171 power exercised by the sister's son over his maternal uncle's
177 family, crept into both Tonga and Samoa from Fiji. Of the
[534] material objects that spread from Fiji to western Polynesia,
the pan-pipes form a good example. The fact that a number of elements of Melanesian culture reached Tonga and Samoa, but penetrated no further eastward into the rest of Polynesia, would indicate that the diffusion was local and probably fairly recent in pre-European times. The restricted character of the diffusion forms an argument against the theory that the route of the Polynesians from Indonesia passed through Melanesia and hence supports the view of the alternate route through Micronesia.

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000 Figure 1—Pan-pipes from Tonga.
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Figure 3—*a* Modern pan-pipe made in Samoa.
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Figure 4—*a* Pan-pipe in British Museum wrongly attributed to New Zealand.
b Pan-pipe from Tanna, New Hebrides (Cook's Voyages).
c Pan-pipe from New Hebrides (British Museum).

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[Caption for this photo is on page 18]

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"Lange Fonue" is the women's handicraft co-operative which has grown over the past decade, with the support of Queen Salote and Queen Mata'aho, into a prominent association. It helps people in villages and islands off the route of cruise ships to organize and send their crafts to the *Lange Fonue* shops in Nuku'alofa (shown here) and Neiafu, Vava'u to be sold to tourists.

'Oku lolo lelei 'aupito 'a Lange Fonue he ngaahi 'aho ni. Kuo 'osi mahalo eni ha ta'u e hongofulu hili 'a hono 'uluaki kamata 'o e kautaha fakamea'a fetokoni'aki ni, pea 'asili foki 'a hono fai malohi e ngaue ni koe'uhi ko hono poupou'i 'e Kuini Salote, pea mo Kuini Mata'aho foki. 'Oku 'i ai foki e falekoloa 'e taha 'o e Lange Fonue 'i Nuku'alofa ('a ia 'oku 'asi 'i he ta) pea taha 'i Neiafu.

[p. 19]

39: Gerstle & Raitt C,Q-4,5 (1952-1972) 1974 OU9 Tonga OU9

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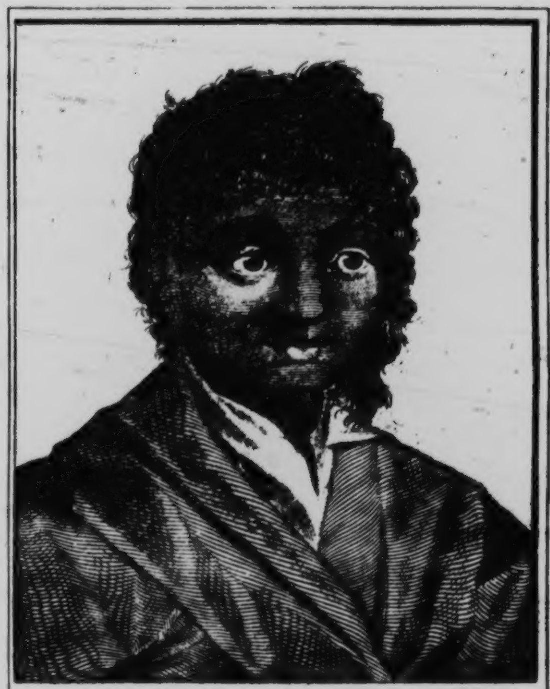

Portrait *of* OTAGO, *or* Attago, *a* Chief *at* AMSTERDAM.

[103]

One of the chiefs of Tongatapu (or "Amsterdam," as it was called by Tasman in 1643), who became a friend of Captain Cook's and who exchanged hogs, fruit and fowls for red cloth, nails and clothing in the usual manner of islander-explorer trade relations.

Ko e ta fakatata eni 'o he 'eiki Tonga na'e fa'ofo'ofani mo Kapiteni Kuki. Na'e foaki ange 'e he 'eiki ni ha me'a tokoni, pea 'oange ki ai 'e Kuki ha konga tupenu kula, fa'o, ngaahi toki ukamea pea mo ha 'u vala.

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Crafts are displayed for sale to tourists on any day that a cruise ship docks at Nuku'alofa.

Fakameili . . . ko ha fo'i lea fo'ou ia fekau'aki mo hono fakatau atu 'o e ngaahi ngaue fakamea'a ki he kau folau 'eve'eva.

[p. 54-A]

433 foreign exchange earnings; however, only with the
457 proper controls can tourism enhance cross-cultural
interchange and understanding and prevent cultural
sterilization, while being financially profitable.

439 As Tonga develops and as her population
continues to grow, more and more foreign goods are
being imported (e.g. canned food, motor vehicles,
433 tobacco, manufactured articles). So, in order to
avoid becoming increasingly dependent
47 economically on other countries, Tonga is currently
179 seeking to develop and pursue interests and small
industries (e.g. forestry, shipping, juice extraction,
fisheries, vanilla production) which will help
increase her cash income, will provide more job

[p.54-C]

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Farming is the basis of Tonga's economy. Although many farmers still grow crops for their own consumption (i.e. staples like taro, yams, plantains), Tonga is gradually making the transition to cash farming (with coconuts, bananas, pineapples, tomatoes, vanilla beans, etc. being cash exports). The "Coconut Replanting Scheme" (photo above) near Fua'amotu is a government project for rehabilitation and expansion of the coconut crop.

Ko e kalakala 'oku tefito ki ai e ma'u'anga mo'ui 'a e kakai Tonga. Neongo 'oku kei to pe 'a e ngoue ke fai mei ai ha kai, 'oku faka'au ke lahi ange eni 'a hono to e ngoue fakapa'anga, hange ko e temata, vanila mo e faina. Ko e ta eni 'o e To Niu Fo'ou ofi ki he mala'e vakapuna 'i Fua'amotu.

39: Gerstle & Raitt C,Q-4,5 (1952-1972) 1974 OU9 Tonga OU9

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Coconuts are one of the most intrinsic elements of life in Tonga, for they have countless domestic and commercial uses. The manufacture of copra (dried meat of the coconut) is Tonga's most valuable industry. *Above:* Husking a coconut at the Tonga Copra Board in Haveluloto, Tongatapu. In early 1974, farmers were receiving 2½ Tongan cents for each nut sold to the Copra Board, a government agency which does bulk marketing and shipping of copra. *Opposite, bottom:* Split coconuts drying in the sun to be sold for making copra, Tonga's main export.

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Ko e halanga pa'anga mahu'inga mo'oni e ngaahi niu 'i Tonga. Ko e ngaahi ta eni 'o hono hoka 'o e niu, fale 'ofisi 'o e Poate Mataka, pea mo hono tauaki 'o e niu.

tensions and compulsions towards growth at subsequent points.'[29] 179 It is not easy to reconcile such a proposition with the Tongan situation. Firstly, Nuku'alofa is not, at least as yet, a 'growing point' in the economic sense, for it lacks the industrialisation which is the 'dynamic force' of development.[30] With barely seven percent of those employed [464] engaged in some kind of part-manufacturing or processing, it generates little of its own wealth. Secondly, with so many of its people dependent [434] on agriculture and with a low per capita income, Nuku'alofa does not [433] stimulate agricultural growth in the outer islands. Lastly, it has virtually [659] no private sector capable of providing investment and government funds are directed mainly towards transport, and services, most of these in Tongatapu.

The resources of Tonga are limited. Agricultural exports accounted 433 for 97 percent of all exports in 1967; coconut products representing [439] 49 percent and bananas 45 percent. As the greater part of the income [651] of government, which is the main investor and employer, is derived [464] from these sources, the level of agricultural production is of vital concern for overall development.[31] The promotion of tourism may increase [457] income levels in Nuku'alofa to the extent where this will ultimately [648] 'trickle down' to the outer islands, and sizeable aid from Britain may ensure an adequate infrastructure for development, but development itself seems firmly based in agriculture, for, with such limited resources, industrial development and growth must originate in the countryside.[32] If this proposition is correct, concentration of resources in Nuku'alofa [179] is unlikely to generate economic growth, at least for a long time, and with population increasing at its present rate this may be too long a time to wait if social harmony and the present social order is to be maintained.

In the meantime, copra production has declined by 50 percent 433 (1957-67), and while banana production has increased by over 280 245 percent, most of this increase has come from Tongatapu which produced 83 percent of exports in 1967.[33] The low level of copra production can be traced largely to neglect in one form or another, and this is likely to affect trees now being planted with British government aid money. I would suggest that neglect stems mainly from these causes:

1. Agriculture generally is held in low esteem, and this influences the amount of money devoted to agricultural development.

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[29] Hirschman (1958): 190, 184.

[30] See Myrdal (1957): 29.

[31] The quasi-government Copra and Produce Boards are in this sense included with 'government'. [655]

[32] For criticism of development fund allocation see Walsh (1967a).

[33] Banana exports 1967 (percent): Ha'apai 9.7, Vava'u 0.8, 'Eua 6.3; Copra exports 1967 (percent): Tongatapu 48.5, Ha'apai 20.2, Vava'u 23.9 (the highest for seven years), other 7.3. [439]

43: Maude K-4,5 (1962) 1970
OU9 Tonga OU9

SHIFTING CULTIVATION AND POPULATION GROWTH IN TONGA

by

ALARIC MAUDE

The relationship between population growth 121
and agricultural systems has been a central question
in some of the recent geographical work in the Pacific
Islands (e.g. Brookfield, 1962; Clarke, 1966;
Lea, 1965). This paper seeks to contribute to this [161]
body of research through a study of the effect of
population growth on the agricultural system of Tonga, an island group which in common with a number of other South Pacific territories has experienced rapid rates of population increase in recent decades. The study also attempts to assess the extent to which the arguments of Ester Boserup on the relationship between agriculture and population growth can be usefully applied to the process of agricultural change in Tonga. Boserup's thesis (Boserup, 1965) essentially is that the intensification of traditional agricultural systems from long fallow to short fallow to multi-cropping occurs only when forced by population pressure, because such intensification involves an increase in labour input and a decrease in output per man-hour. She therefore regards the agricultural system as the dependent variable in the relationship between population and agriculture, and explains differences in cultivation systems as the result of differences in population densities.

THE AGRICULTURAL ENVIRONMENT

The chain of some 150 islands in Western Polynesia 131
which forms the Kingdom of Tonga has a 161
total land area of 256 square miles and supports a
population of about 81,000 (1968). The economy 433
is overwhelmingly agricultural, and is based largely
on subsistence food cropping and the export of 439
bananas, copra and desiccated coconut. Over 90 361
per cent of Tongans live in the three main groups 133
of Tongatapu, Ha'apai and Vava'u (Fig. 1), where
almost all the islands are of raised limestone formation.
The climatic variable of greatest agricultural 132
significance is rainfall, which increases from
a mean of 67 inches at Nuku'alofa (Tongatapu) to

[p. 57-A]

already cropped. Sweet potatoes do better on lighter 244
or less fertile soils, which do not promote excessive
leaf growth at the expense of tubers, while taro is
generally grown on heavier soils. Cassava can be
grown practically anywhere, and because it yields
well even on poor soils is frequently last in the
cropping sequence.

After a cropping period of from two to about
five years the plot is bush fallowed. The cessation [245]
of gardening, however, is often gradual as taro,
cassava, bananas or plantains may remain on the
land and continue to be harvested for one or more
years after cultivation of the plot has ceased, a practice
which is not uncommon amongst shifting cultivators
(Webster & Wilson, 1966). Taro may also
be planted and left in the ground as a reserve against
future needs.

Some cash crops are grown as an integral part of 241
the bush fallow system. Bananas, for example, are 245
frequently planted as part of the cropping sequence
and yield for only a few years before the land returns
to bush. At present, however, with the very marked 245
growth in banana exports over the last few years 439
bananas increasingly are being grown in separate 242
plantations, though often with some inter-cropping
of food plants, and chemical fertilizers are being
much more extensively used both to improve yields
and to extend the life of the plantation. Watermelons 244
are another, but minor, cash crop grown by the
bush fallow system, as the first and sometimes the
only crop planted on newly cleared land.

Coconuts, on the other hand, as a long-term tree 245
crop, are not cultivated as part of the bush fallow
system, but are unevenly scattered over part or all
of each allotment. Most farmers prefer to keep part 245
of their land free of coconuts, because they say that 241
the shade cast by the palms lowers the yields of the
crops grown under them, and in the past a common
practice was to plant half of an eight and a quarter
acre allotment in coconuts and leave the remainder
fairly clear. Particularly in Ha'apai, however, those
with small allotments (around three to five acres)
have found it necessary to plant all their land to
ensure a reasonable cash income. Consequently
the Tongan farmer now rotates his gardens around

[p. 59-B]

131 Tongatapu and 'Eua islands and a few smaller islets. The
131 Ha'apai Group consists of numerous small atólls. Fifteen of
162 161 these were inhabited at the time of the 1966 census. The
total area of the atolls of Ha'apai that were inhabited in
1966 is 20.1 square miles, with a population density of 521
131 per square mile. The Vava'u Group lies to the north-east
of Ha'apai. Like Tongatapu, it has a main island that gives
its name to the Group and a cluster of atolls nearby.

The distance between Nuku'alofa and Neiafu, the main
towns of Tongatapu and Vava'u, respectively, is 165 miles
(usually a matter of three days' journey on the government
132 passenger vessel). Within this distance the climate varies
from tropical in the northern islands to sub-tropical in the
south, with a mean annual rainfall of 86 inches in Vava'u
and 67 inches in Tongatapu (although with considerable
variation from one year to the next).

Yams, taro, sweet potato, manioc, breadfruit, bananas,
241 [184] plantains, coconuts and watermelons are grown throughout
Tonga, albeit in differing proportions in different parts
of the country. Except for breadfruit, these crops yield
all year round, and all but watermelons are important
241 subsistence crops. The principal cash crops are bananas,
433 coconuts and watermelons. Bananas and coconut products
[439] (copra and dessicated coconut) make up more than 90% of the
value of Tonga's exports. The nation's economy is based on

sixty were classed as being engaged primarily in agriculture 162
for household consumption and export. This is a figure for 423
the total population, including men who reside in the towns. 241
As Walsh points out in a paper entitled "A Tongan Urban Peasantry?",

> Town dwellers are inescapably bound up with the land. They own it as much as villagers, they rely on it to supplement wages kept low on the assumption of an additional income from agriculture, they value it as a means of fulfilling family obligations and as a measure of their social importance and they depend on it for food (1969: 93). [465]

The figures on external trade (quoted earlier) further 439
indicate the role of agriculture in the Tongan economy: 423
throughout the 1960s, bananas and coconut products made up over 90% of the value of Tonga's exports. Furthermore, there are no grounds for anticipating the development of
non-agricultural exports on any significant scale. In the 315
late 1960s, much hope was based on the possibility that explorations for oil would prove fruitful. This has not yet
materialized, however. And in trying to develop non- 439
agricultural industries, Tonga is in the difficult position of having to compete with Fiji and Western Samoa, both of which enjoy relatively large home markets and are also more advantageously placed to export their goods.

In view of Tonga's dependence on agriculture both for 311
subsistence and export, the rising population figures are 161
cause for concern about increasing pressure on land as an 241
agricultural resource. A figure for 1963 gives the extent [134]

village had no one engaged in any income-producing activity besides 592
the basic Tongan pattern of peasant production. In the remaining 434
households, there were a total of 54 government employees, both men 464
and women, almost all of whom worked in the main town. In addition,
there were persons employed outside government (mainly as laborers in
various enterprises), or by one of the churches (usually as teachers in a
church-run school). Besides people with jobs, there were people in the 592
village who had business enterprises of their own. Included in this were 434
six stores in the village, two women kept large flocks of chickens and 472
sold the eggs to the big stores in the main town, there were three [444]
privately owned sheds that were hired for movies and dances or used as [235]
copra-weighing stations, two men owned trucks for hire, one man [427]
operated a band, a woman had a dress-making shop in town, and so on.
Other income-producing activities of people in the village included the [439]
cultivation of watermelons (mainly for export to New Zealand) and the [244]
manufacture of handicrafts. [463]

In many cases, the income-producing activities described here were 592
not full-time occupations, nor were they the major source of income for 434
the household. In most of the households in the village, subsistence
production and copra production are the mainstay of the household,
while other income-producing activities serve mainly to provide a more
or less steady flow of cash. On the other hand, households with no 592
source of supplementary income enjoy a noticeably lower standard of 434
living. Among these, for example, there is a greater proportion of the 511
old-style, coconut-thatch houses or old and shabby wooden houses—peo- 342
ple without supplemental sources of cash income find it more difficult to
obtain the large amount of cash needed to build a new wooden or brick
house.

The major part of the everyday cash requirements and other 592
material needs of a household are provided for if the household has 423
access to an agricultural allotment (*'api 'uta*). Although this is not the [434]
place to describe the Tongan system of land tenure in any detail,[11] the
following notes will suffice to indicate the major elements involved in a
household's having access to an allotment. In theory, every male over
the age of 15 is entitled to an agricultural allotment of 8¼ acres
registered in his name. In practice, however, about 60% of all who are
eligible do *not* have land in their names (largely because of shortages
stemming from the pressure of increasing population). Some men, on
the other hand, have effective control over more than one allotment,

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[11] For articles dealing with the system of land tenure, see Maude (1972) and Nayacakalou (1959). In addition, refer to Rogers (1969) for a discussion of the *Report on the Results of the 1966 Census* (Fiefia 1968) that focuses on the findings relating to population increase and its effects on land holding.

49: Rogers A-4,5 (no date) 1969 OU9 Tonga OU9

161 Kingdom's total population, had 58.9% of the total households with two family units and 63.2% of the households with three or more family units.

162 592 The Report does not distinguish whether households with several families have come about as a result of grandparents, son and wife, and grandchildren living in the same household, or as a result of brothers and their wives sharing one household. It is also unclear how the local census officers demarcated dwelling units clustered together and cooperating as the one single household. In many parts of Tonga there is a precedent in custom for three or even four generations of the same kin-group to live within the same *'api*, the family unit of the oldest son occupying the main dwelling with other units (parents and unmarried siblings; families of [593] married siblings) having separate dwellings around. Because of the traditional brother-sister *tapu* there may be an additional hut for unmarried sons. There is less precedent in Tongan custom for two or more family units of the same generation (e.g. siblings, their spouses and children) to live within the one dwelling: this could be a criterion of overcrowding.

It seems from the census figure of 16% ("households" with more than one family unit) that overcrowding is not yet severe in Tonga except in [342] Nuku'alofa. Here families of siblings are sharing dwellings, and huts are being built on swamp land. Elsewhere, the occurrence of households containing more than one family unit may be accounted for as the persistence of the traditional co-resident extended family, comprising several generations where each "extra" family unit may have its own separate dwelling house which may or may not have been recorded in the census schedule as a household. The increase in average household size has been accompanied by a fall in average overall acreage of land per household from 15.08 acres per household in 1956, to 10.98 acres in 1966.

* * *

121 The population densities already discussed have little meaning except in relation to the availability and utilization of natural, agricultural and 13 human resources. The natural resources of Tonga comprise almost 311 exclusively the soils, reefs and surrounding seas with, in late 1968, an elusive possibility of oil; the agricultural resources comprise almost entirely trees—particularly coconut, banana, breadfruit—and ground crops grown mainly without mechanical aids by slash-and-burn methods. 128 Human resources are discussed at the end of this paper.

Dependence on agricultural produce is enormous; in 1961 and 1964 433 these products amounted to 98.19% and 96.39% respectively of Tonga's [439] total export earnings with copra (the dried kernel of the coconut) forming the basis of the economy and constituting over 80% of the visible exports [241] throughout the 1960s.(6) Agricultural products are the surpluses and small cash-crops of Tonga's 12,000 or so peasant farmers who are scat- [463] tered throughout the Kingdom and rent their allotments either from titled [427] nobles or directly from the Government.

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6. TONGA, 1960-1967 *passim*. Total exports for 1961 amounted to £T1,374,658; agricultural exports £T1,349,461; non-agricultural exports £T25,197.

49: Rogers A-4,5 (no date) 1969 OU9 Tonga OU9

GARTH ROGERS

Systematic development of agricultural resources was the prime concern 654
of Tonga's first development plan (1965–1970), the main effort and spending
being allocated to a comprehensive Coconut Replanting Scheme.
Banana exports to New Zealand and Japan have fluctuated although 439
they have gradually increased throughout the 1960s. But other agricultural
exports—such as watermelons, fungus, groundnuts, pineapples, vegetables
and ginger—comprise only a very small fraction of the total exports.
Other crops are either completely absorbed by home consumption or are, 433
as yet, only in an experimental stage.

A fishing industry has been established in Nuku'alofa with the aid of 228
Japanese experts but in 1968 it was barely supplying the home market.
Local private fishermen would sell a string of small fresh fish, in all about
three to four pounds, for about fifty *seniti* (NZ50c). Fish was sold in the 655
government market at intervals of about two weeks but the supply rarely 443
lasted more than one day. Tuna and shark caught by the government
vessel were refrigerated in the government market and sold for ten and
four *seniti* per pound respectively. Labourers' wages at that time in
Nuku'alofa were one *pa'anga* (100 *seniti*) per day. By early 1969 small [439]
shipments of crayfish tails were being transhipped to the United States
via Fiji by an Australian fisherman who owned his own craft but employed
local Ha'apai labour.

* * *

A very high proportion (75.57% or 57,526) of the total Tongan population 162
was classified in the 1966 census as "economically inactive", that is, 464
as persons not engaged in any form of "industry" ranging from subsistence
agriculture to public service. Included in this category were 16,308 or
81.3% of all adult Tongan women who were engaged in "home duties",
all children under fifteen years of age, and all who were students over
fifteen years or retired. It should be understood, however, that women 462
perform some important economic tasks such as assistance with food-gathering 162
and copra-making. Moreover, according to the traditional
division of labour in Tonga, women make mats, baskets and bark-cloth
as part of their "home duties". Nevertheless, only 1,013 or 5.0% of adult
Tongan women were engaged in activities other than these.(7) No Tongan
women were listed as employed in "government and administration"
(excluding government clerks); 607 or 3.02% of all adult Tongan women
(compared with 1,715 Tongan males) were listed as employed in "services"
(religious, educational, medical, personal; not transport); 173 or 0.86%
(compared with 180 Tongan males) in "commerce"; and only 18 or
0.089% (compared with 579 Tongan males) in "part-manufacturing and
processing" industries.(8) In Tonga, the traditional idea and practice that [562]
man is the provider and head of the household still persists.

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7. TONGA, 1968: Table 12b, 72–74.
8. In 1961, 9.5% of all adult Western Samoan women were classified as "economically active" (excluding "village agriculture"); 7.9% of all adult women, mainly the 15–29 age-group, were engaged in "industry" of one sort or another. The 1966 Cook Island census (pp. 5, 55) lists 1,620 adult Cook Island women or 35.4% of all adult females as "economically active" of whom 1,032 resided in Rarotonga. Cook Island women engaged in manufacturing numbered 301 (compared with [171]

000 imperceptibly effected, the waves receeding with it leaves a dry rock behind for the reception of broken coral, sand &ca.[1]

122 After leaving Palmerstone Island I steered west with a view of making the best of my way to Annamocka. We still continued to have variable Winds, frequently between the North and West, with Squals, thunder and much rain. During these Showers which were generally very copious we saved a good quantity of water; and finding we could get more by the rain in an hour than by the still in a Month, I laid it aside as a thing attended with more trouble than profit.[2]

Thur. 24[3] Fri. 25 Mon. 28 In the night between the 24th and 25th we pass'd Savage island,[4] and on the 28th at 10 AM we made the islands which lay to the Eastward of Anamocka,[5] bearing WBN about 4 or 5 leagues distant. I steered to the South of these islands and then hauled up for Anamocka, which at 4 PM bore NWbN, Tellefages[6] SWBS and Comango[7] NBW distant about five miles. The Weather being Squally with rain, I anchored at the approach of night in 15 fathom water over a bottom of Coral sand and Shells, Comango bearing NW about 2 [439] leagues distant. Soon after we had Anchored, we caught with hook and line a good quantity of fish and the inhabitants of the island brought off a few Cocoanuts and bread fruit which they exchanged for nails. . . . . .

TUESDAY 29*th*. At 4 AM sent Lieutenant King with two boats to Comango to procure refreshments, and at 5 made the Signal weighed 439 in order to ply up to Anamocka, the wind being at NW. It was no sooner day light than we were visited by several people who came

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[1] It is interesting to find Cook indulging in the reasoning of the foregoing paragraph; and as usual, when he generalizes from his own direct observation, he is not far from the truth as it was obtainable in pre-Darwin days. He is generalizing on 'low' islands, be it noted, not on the volcanic variety; and he mentions, only to ignore after mentioning, the theory that low islands may have been thrown up by earthquakes. He had probably discussed the matter with Anderson; cf. pp. 855–7 below.

[2] 'Our Stock of Water being reduced to 7½ Tons, went to a daily allowance of 2 quarts, exclusive of what was used for boiling the pease, wheat and sweet wort. this regulation makes one Hogshead last the 24 hours. Water on board at leaving New Zealand, 27 Tons.' —Burney journal, 21 April.—'left the Water Cask free again, having this last week, caught at different times with our Awnings, between 3 and 4 Tons of rain water.'—ibid., 26 April.—'We've had some very heavy showers during these 24 Hours. We caught a Ton of Water which we find very good.'—Clerke, 26 April.

[3] 'Philip Woodfie[l]d Carpenters mate whilst in the execution of his duty on deck fell down and broke his leg.'—Griffin. He fell under the tiller, adds Burney.

[4] Niue; for Cook's previous visit and the name 'Savage' see II, pp. 433–9. At 10 p.m. 'Mr Gore saw land, but what he saw was judged a deception made by the moon's shadow, for we did not imagine ourselves so near.'—King. Later the *Discovery* made the signal for seeing land.

[5] Cook was now coming into the Tongan islands a little south of his track from the east in June 1774, which he crossed just south of these islands, the Otu Tolu group. Anamocka is of course Nomuka.

[103] [6] Kelefesia, the southernmost island of the Nomuka group. [7] Mango.

off in Canoes from different islands, bringing with them two pigs and 439
a quantity of fruit and roots all of[1] which they exchanged for Hatchets,
Nails, beads &c^{a}. About 8 or 9 oClock M^{r} King returned with seven 648
hogs and a quan[t]ity of Fruit and roots; there came with him the 431
chief of the island named *Tooboulangee*[2] and another whose name was
Tapah,[3] they brought me a present of a hog with a promise of more 634
the next day. As soon as the boats were aboard I stood for Anamocka,
and as the wind was scant, I intended to go between Anamocka etc[4] 122
and the breakers to the SE of it, but on drawing near we met with very [133]
erregular Sound^{gs} varying every cast 10 or 12 fathoms, so that I was
obliged to give up the design and go to the Southward of all; this
carried us to leeward and obliged us to spend [the] night under sail.
It was very dark and we had the Wind from every direction, accompaned with heavy Showers of rain, so that at day-light the next
morning we found our selves much farther off than we were the evening before and the little wind we had was right in our teeth. We Wed. 30
continued to ply all day to very little purpose and in the evening anchored in 39 f^{ms} Water the bottom Coral rocks and broken shells—
the west point of Anamocka bearing ENE four miles distant. Toobowlangee and Tapah kept their promise and brought me off some hogs, 439
and I got by exchanges from different people several others and as [431]
much fruit as we could dispence with.[5] It was remarkable that during
the whole day, the Indians would hardly part with any one thing to
any body but me, Captain Clerke did not get above one or two hogs.
Knowing from experience, that if every body was allowed to traffick
with the natives according to thier own caprice, perpetual quarrels
would essue, to prevent this I ordered that particular person[s]
should manage the traffick both on board and ashore, and prohibited
the trade to all others. I also ordered that no curiosities should be
purchased till the Ships were supplyed with Provisions and leave
give[n] for that purpose.

At 4 AM hoisted out a boat and sent the Master to Sound the MAY
SW side of Anamocka where there appeared to be a harbour, formed Thurs. 1

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[1] *two pigs . . . all of:* Adm 55/111 *two Hogs, or Pigs, some Planteins yams, Breadfruit & Cocoanuts.*

[2] Tupoulangi.

[3] Tepa possibly, but probably Kepa would be the better form: Anderson 'Taipa or Kaipa', Burney Kaper, Edgar Kapee. It looks as if he was a *matapule*—not a chief, but what we might call an administrative official, of some importance. [565]

[4] Nomuka Iki ('little Nomuka'), the little island about a mile south-west of Nomuka.

[5] 'The Natives soon gave us a specimen of their happy genius in the art of pilfering, by stealing a hatchet out of the galley, for which, Rich^{d} Young a quiet and good man was punished with twelve lashes.'—Williamson, 30 April. But he was probably inattentive, as well as quiet and good. He was cook's mate. Charlton records the punishment as 6 lashes, for neglect of duty and is probably more reliable.

[1777]

122 by the island on the NE and small isles and shoals to the sw and SE.
In the meantime the Ships were got under sail and worked up to the
133 island; when the Master returned he reported that he had Sounded
between great and little Anamocka, where he found 10 & 12
fathoms, the bottom Coral Sand, that the place was very well
sheltered from all winds but that there was no fresh Water but what
122 was some distance in land, but little of it and that little not good. For
this reason only I determined to anchor at the old place on the north
side of the island, but though we were not above a league from it [it]
122 was 5 oclock in the after noon before we got to an Anchor. A considerable
Number of Canoes being continually about the Ships, retarded
609 them considerably. There were amongst them some double
ones with a large sail that sailed round us apparently with the same
122 ease as if we had been at anchor. I came to an anchor in the very
same place as I did when last here, viz, in 18 fathom Water, the
bottom Coarse Coral sand; the island extending from E to sw and
Fri. 2 the West point of the Westermost Cove SE about ¾ of a mile distᵗ.[1]
648 The next morning while preparation were making for Watering, I
went ashore accompaned by Captain Clerke and some of the officers,
to fix on a place to set up the observatories and to keep a guard,
leave being soon obtained of the Natives who accomodated us with a
648 boat house and shewed us every other Mark of civility. *Toobow* the
634 Cheif of the island[2] took me and Omai to his house, situated in a
pleasent spot in the midst of his plantation, a fine grass plat lay round
356 the [door?] which he gave us to understand was to clean their feet
[352] upon, a mark of cleanness I had no where observed in this sea before,
but afterwards found it was very common at these islands. The floor
of the house was laid with Mats and no carpet could be kept cleaner.
439 While we were a shore we bartered for a few hogs and some fruit, and
before we got on board the Ships were filled with the natives and as
122 few came empty we found no want of anything.[3] In the after noon I

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[1] On this anchorage cf. II, p. 451. 'Westermost Cove' here seems to bear out the correction suggested in n. 1 on that page.

[2] Presumably, but not clearly, Tupoulangi already mentioned. 'The Chief of Anamooka whose title is Agee, was named Tubow, a middle aged man, more modest and sedate [565] than we found the generality of these people. Another chief of some consequence was named Kaper; this man was remarkable for making long orations to his countrymen.'— [537] Burney journal, 2 May. 'Agee', *'eiki* (cf. Tahitian *ari'i*, Maori etc. *ariki*). 'Kaper', Cook's 'Tapah', or Kepa.

[3] 'Kept all kind of Provisions from the ship's Compʸ except Spirits and Servd fresh Pork Breadfruit, Yams Plantains &c in leiu.'—Harvey log, 1 May.—'This day having purchas'd among the Canoes as much fresh Pork, Breadfruit, Yams and Plantains as wou'd serve the People for the present, I stopd every Species of their Sea Provision except the Grog, and serv'd it to them, so that now we enter upon quite a new Regimen, and a most salutary one it is; tho' Thank God our last agreed with us very well, we have not a Man in the Sick List. This Forenoon I receiv'd an Order respecting the Trade and Provision from Capᵗ Cook which I immediately put in force.'—Clerke, 1 May.

spend under sail with land and breakers in every direction. Towards 122
the evening Feenough who had been on board all day, went a shore
to Happi and took Omai with him, he did not forget our situation 634
and kept up a good fire all night by way of a land mark. 648

SATURDAY 17*th*. At day-light the next morning I sent a boat to look
for anchorage, she soon found a place and we came to in 24 fathom 122
the bottom Coral sand, the northern point of Happi or the north end
of Ha-an-no bore N 16° E, the Southern point of Happi or Hooleva 133
S 29° W, and the North end of Lefooga S 65° E.[1] Two ledges of rocks [131]
lay without us, the one bearing S 50° W and the other WBN½N distant
2 or 3 miles. We lay before a creek in the reef which made it convenient
landing at all times and we were not above ¾ of a mile from
the shore. By the time we had anchored the Ships were filled with
the Natives and surrounded by a multitude of Canoes, filled also 609
with them. They brought with them hogs, Fowls, fruit and roots
which they exchanged for Hatchets, Knives, Nails, beads, Cloth &c^a. 439
Fenough and Omai having come on board soon after it was light in
order to interduce me to the people ashore I now accompaned them 634
to the isle[2] for that purpose; The Chief conducted me to a house situated
close to the Sea beach which I had seen brought thether but a 648
few minutes before. In this we were seated that is The Chief, Omai
and my self, the other chiefs, and the Multitude seated themselves in
a circle without before us. I was then asked how long I intended to 634
stay, on my saying five days, Tapah was order[ed] to come and sit by 648
me and proclaime it to the people. He then Harangu'd them in a set 565
speach mostly dictated by Feenough. The purport of this speach as I 537

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[1] See Edgar's Chart XLVI and Fig. 5. The islands Cook names are Ha'ano, Uoleva and Lifuka. These are three of the largest of the Ha'apai group. But Uoleva does not provide the 'Southern point' of the group: Uiha is a more southerly, and larger island, close to it. Edgar's chart gets the relative positions of the islands quite well, though his names, apart from 'ar-no' and 'Lafugar' are misplaced. [103]

[2] What isle? It is curious that Cook does not more closely define his landing place; but we know from other records that it was at the northern end of Lifuka—cf. *Voyage*, I, p. 242: 'landing at the North part of Lefooga, a little to the right of the ship's station'. This, together with Chart XLVI, where the anchorage is marked, and what is evidently the 'creek in the reef' mentioned by Cook, would argue that the precise place was towards the tip of the island (the point Ahanga), almost at the northern end of the bay called Faka'amumei. Local tradition now records the anchorage correctly enough, but has the landing-place at the point called Muikuku, the south-west end of the bay, just east of which is the village called Koulo. Now Koulo means 'gold'; and why should a Tongan village be thus called? Because, say the old men, when this village was built it was called [103] 'Gold' in memory of Captain Cook's visit; for his boats were full of bags of gold. Cook presented a few medals, left over from the second voyage, at various places on this voyage; and very likely here. Brass or 'platina' may well have come down in tradition as gold. The story was told to me on a trip by cutter to the outlying island Mo'unga'one in July 1958, to explain a sudden surprising question 'What did Captain Cook's ships weigh?' The Tongan knows that gold is heavy; but when he first saw—or last saw, for that matter—a gold coin I do not know.

634 lear[n]t by Omai, was that all the people both young and old were to
look upon me as a friend who was come to remain with them a few
648 days, that they were not to steal or molest me in any thing, that they
565 were to bring hogs, fowls, fruit &c^{a} to the ships where they would
537 receive in exchange such and such things. Soon after Tapah had
done haranguing the people, Fenough left us and Tapah gave me to
understand it necessary I should make a present to the Chief of the
island whose name was *Earoupa*,[1] I was not unprepared and made him
a present that far exceeded his expectation, this brought upon me
two Cheifs of other isles and lastly Tapah himself. When Feenough
returned which was immidiately after I had made the last present,
he pretended to be angry with Tapah for suffering me to give away
so much, but I looked upon this to be all a feness. The Cheif again
took his seat and ordered Earoupa to set by him and to harangue the
people as Tapah had done, the subject was chiefly dictated by Fee-
634 nough and was to the same effect as the other. These Ceremonies
being over, the Cheif at my request conducted me to three standing
648 pools of fresh water as he was pleased to call it, in one indeed the
[312] water was tolerable and not inconvenient to come at.[2] After Viewing
the Water we returned to our former station, where I found a baked
[431] hog and some yams all piping hot put up for me to take on board. I
invited the chief and his friend to pertake of it they excepted my in-
vitation and we all imbarked for the Ship, but none but the chief sat
[431] down to table. After dinner I conducted them ashore and before I
came on board the Chief gave me a fine large Turtle and a quantity
[439] of yams, and we got by barter along side the Ship about twenty small
hogs besides fruit and roots. I was told that soon after we went ashore
609 in the Morning, a man came off and ordered every one of the Natives
a shore, probably it was to be present at the ceremony for that was
796 no sooner over than they returned.

634 SUNDAY 18*th*. Early in the Morning Omai, who generally slept
ashore, and Feenough came on board. After some time I accompaned
648 them ashore and was conducted to the same place as I was at the day
before, where a large concourse of people were assembled, I guess'd
some thing or another was going to be done but could not till what
[431] nor could Omai inform me. I had not sit long before near a hundred
[651] people came laden with Yams, Bread fruit, Plantain Cocoanuts and

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[1] Tongans cannot explain this name, or give an equivalent: possibly Alupe or Tealupe. Tealupe was the *matapule* of Uiha, close to Lifuka.

[2] There is still a well at Koulo, once merely a deep pond about four feet across, now with a concrete wall around it and a cover on top; its water is regarded as very good, at least for washing. This could very well have been the 'standing pool' Cook refers to, as Koulo would have been an easy stroll from the northern end of the bay.

54: Cook G,T-5 (1777) 1967 OU9 Tonga OU9

648 634 [484 438 439] In the morning of the 23rd as we were going to unmoor in order to leave the island Feenough and his prime Minister Tapah came along side in a sailing Canoe and informed me they were going to *Vaugh waugh* an island which lies about Two days sail to the north ward of Happi, to get some red feathered caps for me and Omai to carry to Otaheite where they are in high esteem.[1] Feenough said he should be back in four or five days and desired I would not sail till his return when he would accompany me to Tongatabu. I thought this a good oppertunity to get some knowledge of Vaughwaugh and proposed to him to go thither with the Ships, but he seemed not to approve of this and by way of deverting me from it, told me there was niether harbour nor anchorage about it, I therefore consented to wait his return where I was and he immidiately set out.[2]

648 SATURDAY 24*th*. The next day our attention was for some time taken up with a report the Indians industerously spread about that a Ship like one of ours was at anchor in the Road of Anamocka. What helped to give some credit to this report was Toobow the Chief of that island hastening thither to receive these new comers as the propagators of the report were pleased to tell us, and as we knew he had but just left us we were the more ready to believe it. However to gain some further information, I went a shore with Omai to look for the man who brought the first account of it from Anamocka; we found him at the Cheifs house, where Omai put such questions to him as I thought necessary and the answers he gave were so clear and satisfactory that I had not a doubt of the truth. But just about this time a Cheif of some note and one whom we knew arrived from Anamocka and declared that no ship was nor had been there sence we left it. The man who propagated the contrary report sliped out of the way so that we saw him no more. Thus the whole appeared to be a story artfully invented to answer some end or other, but what is not easy to conjecture, unless it was to get us removed from the one island to the other.[3]

[648 685 634] Conception, & had any man of less Humanity than the Captns Cook & Clerke Commanded, many of these people must have lost their life, from the daring attempts they were hourly making on us.'—Martin, 23 May.

[1] The island was Vava'u, about 60 miles NNE of Ha'ano, and the centre of Finau's power. 'Finow's business thither was to procure red feathers, which were become a valuable article of traffic; our people giving any price for them, on a supposition that they will turn to good account when we arrive at Otaheite.'—Burney, 23 May.

[2] Finau was here guilty of a thundering lie, for Vava'u has in the deep, winding, and beautiful inlet of Neiafu what is in some respects the best harbour of the group. True, Cook would not have found the holding ground very good, but it is a pity he did not see the place. Most chiefs, it may be noted, were only too anxious to add to their importance by getting Cook to their own islands.

[3] This suggested reason may very likely have been the true one. Cook had previous experience of such a story at Raiatea in June 1774 (II, p. 427), when Banks and Furneaux

SUNDAY 25*th*. In my walk to day I happened to step into a house 751
where a Woman was dressing the eyes of a young child which was 752
blind; the eyes were much inflamed and seemed to be covered with a
thin film. The instruments she used were two slender wooden probes, [413]
with which she had probed round the eyes so as to make them bleed;
she had almost finished the opperation when I went in so that I saw
but little of it.[1] In the same house another women was shaving a 302
Childs head with a Sherks tooth stuck into the end of a piece of stick,
she first wet the hair before the razor with a rag diped in water; the 297
opperation gave no sort of pain to the Child although the hair was [412]
taken off as close as any of our razors would have done it,[2] I tryed
one and found it an excellent succedanuem. But the men shave the
beard with two shells, one of which they place under a small part of
the beard and with the other scrape that part off;[3] in this manner
they will shave very close, the opperation is rather long but no ways
painfull and there are men who seem to profess it, and it was as
common for to see some of our men sit to be shaved by these shavers,
as it was for the Chiefs to come aboard to be shaved by our Barbers.[4]

Finding we got little or nothing where we lay,[5] I resolved to 122
change our station and wait Feenoughs return in some other place; 133
accordingly in the fore noon of the 26th we got under sail and Mon. 26
stood to the Southward along the reef of the island, having 14
and 13 fathom water a sandy bottom. We however met with several
detatched Shoals, some were descovered by breake[r]s, some by the
Water upon them appearing discourlered and others by the lead. At
half past two PM having past several of these shoals and seeing more

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were said to be at Huahine; and he was to have another one, p. 196 below. '... the man [648]
gave such answers & drew the number of the masts upon the sand, as to stagger us & put some confidence in the report, the fellow was very ready to go in our boats to prove the truth of his tale.'—King.

[1] Mariner has an interesting paragraph on Tongan ophthalmia and eye-surgery, II, p. cii: ending, 'Mr Mariner neither saw nor heard of but one man who had lost his sight by disease'.

[2] 'an absolute falsity [it] will not take it off so [well] as scissors.'—Bligh AL, I, p. 260.

[3] 'this is a better [plan] and they cut their bea[rds] off pretty close.'—Bligh AL, I, p. 261.

[4] 'none of our Sailors could bear it & none more than once try['d how] they liked the meth[od].'—Bligh AL, I, p. 261. Cf. Ellis, I, p. 93, on Tongan feelings in the matter: 'This operation [with shells] however is rather painful and tedious, and observing how expeditious and clean we performed it, they were desirous of trying it also; and it so far exceeded their expectations that scarce a day passed without plenty of customers.'

[5] 'But we have purchased almost all their commodities; they having very few things to [336]
dispose of except their young Girls which seems to be almost the only trade at present, &
indeed is very advantageous to the men, for they are paid a hatchet for every nights lodging, or a Shirt.—This seems the Common run of trade—but in some instances I have seen [439]
two hatchets & a shirt or sheet given for a Nights lodging with a fine young Girl.—The men receive what is agree'd for & leave them on Board, & come for them again the next morning, & if the girls get any thing more they take it away the moment they come.'—Bayly T, 28 May.

was observed in taking them away and I observed no one spoke to 648
him standing. I stayed till several of his attendants left him, first 643
paying him Obseisance by bowing the head to the sole of his foot, and 643
touching or taping the same with the upper and under sides of the [644]
fingers of both hands.[1] Others who were not in the circle came as it [576]
seemed on purpose and paid him this mark of respect and then re-
tired without speaking one word. I was quite charmed with the
decorum that was observed, I had no where seen the like, no not even
amongst more civilized nations.

When I got on board I found the Master returned, he informed 122
me that so far as he had been, there was anchorage and a passage
for the Ships, but that towards the South and SE he saw a number of
small isles, shoals and breakers. Fore seeing that to go this way
would be attended with some risk, I thought it better to return by
the same rout as we came and should have sailed the next morning, Wed. 28
had not the wind been too far Southerly and very unsettled withal.
Fattafee Polaho the King as I shall now call him came on board be- 292
times and brought me one of their Caps made or at least covered
with red feathers: these Caps were much sought after by us from [643]
knowing they would be highly valued at Otaheite. But though very [648]
large prices were offered not one was ever brought for sale, which
shewed they were no less valuable to the people here, nor was there a [439]
person in either Ship that got one but my self Capt Clerke and Omai.
These Caps or rather bonnets are made of the tail feathers of the [237]
Tropic bird with the red feathers of the Paroquets[2] worked upon them
or in along with them, they are made so as to tie upon the forehead
without any Crown, and have the form of a Simicircle whose radis is
18 or 20 Inches; But a painting which Mr Webber has made of Fat-
tafee Polaho dressed in one of these bonnets will convey the best idea
of them.[3]

The Cheif stayed on board till the evening when he left us but his 643
Brother, whose name was also Fattafee,[4] and one or two more re- 648
mained on board all night. 644

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[1] The observance called *moemoe*. Cook, on his previous voyage, had seen it paid to Latunipulu.—II, pp. 256–7. The 'bowing the head to the sole of his foot' was a special observance to one's hereditary chief. For any other chief the rest of the ceremony would be the essential part.

[2] The Blue-crowned Lory, *Vini australis*. It appears that most of the Tongan red feathers, however, were not a domestic production but came from Fiji. [439]

[3] See *Voyage*, I, pl. XVIII. This may give a good idea of the bonnet, but it hardly answers to Cook's description of the subject: it shows the head and shoulders of a personable young man, neither the features nor the shoulders being those of a 'most corperate plump fellow'; nor are the features recognizably Tongan—or indeed very Polynesian at all. The bonnets (*fae* or *faefae*) were worn at times of great festival or ceremony.

[4] He is more particularly known as Ma'ulupekotofa. He was Paulaho's older half-brother. Their mothers were both secondary wives to the 35th Tu'i Tonga, whose children

122 with beating about amongst the islands and shoals as they were and
determined to get to an anchor some where or a nother if possible.
[133] While the boat was absent, we attempted to turn the Ships through
the Channel, between the Sandy isle and the reef of Ogodoo, in expectation
of finding a moderate dept[h] of Water behind them to
anchor in, but meeting with a Tide or Current against us were
obliged to desist and anchor in 56 fm water with the Sandy isle
[648] bearing EBN one mile distant. We lay here till the 4th during this
time we were several times visited by Fattafee the King, Toobow-eitoa,
[643] and people from the neighbouring island[s] came off to trade
[439] notwithstanding it blew very fresh most of the time. The Master was
sent to sound the Channels between the islands to the Eastward and
I landed on Ogodoo to examine the island and take a View of the
134 Shoals or reefs about it. I walked all over it, the north part is low
land, the soil composed of Sand and Mould. The South end is elevated
[133] and the soil a red sandy clay without a stone, every part is
[311] cultivated and there are some pools of dirty Water on the low ground
[312] and all of them more or less brackish.

Wed. 4 On the 4th at 7 AM we wieghed with a fresh gale at ESE and stood
Thur. 5 away for Anamocka where we anchored the next Morning nearly in
122 the same place where we lay before. I landed soon after and found
the Inhabitants very busy in their plantations diging up yams to
439 bring to Market, they were now in the greatest perfection and we
procured a good quantity for pieces of iron. Before I returned on
241 board I visited the several places where Mellon seeds & plants
199 had been planted and had the Mortification to find that the most
of them were distroyed by a small ant,[1] but [the] Pine-aple plants
Frid. 6 I had planted were in a flourishing state. About noon the next day
164 Feenough arrived from Vaughwaugh he told us that several Canoes
122 laden with hogs &ca that sailed with him from the island were
lost in the late blowing weather and every soul in them perished;
but as this melancholy tale seemed not to affect any one of the
Indians, I did not beleive it; yet it might be, for it had blown hard
for these parts, in so much that the King and others at Ogodoo durst
not venture to Sea when we did, but desired I would wait for them
at Anamocka which was the reason of my anchoring there the second
Sat. 7 time. The following Morning the King and all those who had been
643 wind bound with him arrived, I was at this time a shore with Feenough
648 and left him to visit the other; who I found seting with a few
634 people before him, but as several came to pay their court to him

[1] The ant in Tonga is called *lo*; but there are more than one species, so that it is impossible to identify the criminal.

[136]

sails a shore to repair and a party cuting wood for fuel and Plank for 122
the use of the Ship. The gunners of both Ships were ordered a shore to traffick with the natives, who thronged from all parts with Hogs, 439
yams, & cocoanuts &cª so that our little post was like a fair and the Ships so thronged that we had hardly room to stir on the decks.

Feenough had taken up his residence near us, but he was no longer 648
the acting man, we however found him to be a man of consequence and property and still continued to make us presents of Hogs &cª. 634
As to the King scarce a day pa[s]t that had not some thing con- 431
siderable from him. We heard of other great men which we had not yet seen particularly one *Mariwaggy*,[1] who we understood was Fattafee 648
Polaho's Father and the first man on the island, but that he was an 643
old man and would not visit us; some even hinted, that he was too [431]
great a man to be seen by us, at least so Omai interpreted it.[2] The account they gave of this Chief made me very desirous of seeing him and I at last prevailed on Fattafee the King to accompany me the next Morning to the place of his residence. Accordingly we set out Thur. 12
pretty early, accompaned by Captain Clerke in his own boat, Omai and some of the officers. We proceeded round and to the Eastward of the isles that forms the harbour and then entered a large inlet up which we rowed about one league and then landed near to the residence of this great man.[3] We had no sooner landed then we were told that he was gone to the Ships. I susspected this was not true, but that he was gone out of the way in order not to be seen by us, as some had suggested. Pequed at being thus disapointed, after a short stay I returned on board, when we found Mariwaggy had not been nor was he expected. It however afterwards appeared that Omai [124]

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[1] Macaliuaki.

[2] Macaliuaki was certainly Paulaho's 'classificatory father': the term *tamai*, father, would include all paternal male affines. He was indeed a very great man, and in a secular sense certainly the 'first man on the island', and indeed in all Tonga; for having been Tu'i Ha'a Takalaua (the fourteenth and last of the succession), hence deriving great prestige and privilege, he became Tu'i Kanokupolu (the eighth of that line)—and it was the Tu'i Kanokupolu who was the effective principal ruler of the group. Cf. II, p. lxxv. A venerable figure, 'grey with age', as Cook notes below, he was to die later in this year 1777.

[3] The place of this landing is traditionally remembered. Cook had to take the same circuitous route anyone must take nowadays from the Nuku'alofa jetty—round the islands [487]
and into the lagoon through an extraordinary mass of coral reefs. The lagoon forms two arms. Just off the present road, which runs close to the lagoon, a little south-west of the large village of Mu'a, is a very little cove, part of a larger wide cove at the bottom of the eastern arm of Mu'a inlet; and here, it is said, Cook stepped ashore. He could hardly do so now. Mangroves have crept all round and the shore is very muddy; trees hang over the [137]
water and the coral of the bank has fallen away in large pieces; a few yards from the water [133]
a huge banyan (*Ficus obliqua*) marks the scene. The place is called Alaki, though the village of Alaki has been moved a mile or so to the south. It is possible, however, that tradition is mistaken in being quite so precise, because the text (p. 138 below) refers to the village as [361]
'Moa' or Mu'a; ancient Mu'a, however, was very near, and it is even possible that Alaki village did not then exist.

[TEXT CONTINUED ON PAGE 127]

54: Cook G,T-5 (1777) 1967 OU9 Tonga OU9

Before I returned on board I set on foot a trade for Hogs and Yams, 439
of the first we got but few but of the latter plenty. I put a shore at
this island the Sheep I gave to Mariwaggy, viz a Ram and two Ewes 231
of the Cape breed; they were intrusted to the care of Ta-oo-fa who 177
seemed to be proud of his charge. As the Dogs had not yet got to this
island I looked upon it to be the properest place for sheep.

SUNDAY 13*th*. The 13th in the after noon a party of us traveled to the 123
top of the highest hill in order to have a View of the interior parts of
the island. About half way we crossed a deep Valley, whose bottom
and sides were clothed with timber, though composed of hardly any 133
thing but coral rock, which, as was observed on Tongatabu, was per- [137]
forated into all those holes and inequalities we find it on the Sea
Coast, though this could not be less than two or three hundred feet
above the livel of the Sea. Indeed we found the same Coral till we
began to approach the summits of the highest hills, these were chiefly
composed of yellowish soft sandy stone. The soil for the most part is 134
a redish Cley which in many places seemed to be very deep.[1] On the
very summit of the highest hill is raised a round platform or Mount 345
of earth, supported by a wall of Coral stone, which to bring so high
must have cost much labour. Our guides told us that this Mount was
raised by order of their Chief and that they sometimes met there to [276]
drink Cava[2]—there being a spring of very good Water not many [312]
paces from it, and about a mile lower down a runing stream which
we were told finds its way to the Sea when the rains are copious; we
also met with Water in many little holes so that by diging no doubt
but great plenty would be found. From this hill we had a full View 133
of the whole island except a part of the south point; the SE side from
which the hills are not far distant, rises with very great inequalities 137
directly from the Sea, so that the plains and Medows, of which here
are some of great extent, lay all on the NW side; and as they are

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[1] 'Eua geologically is an interesting combination of the coral and the volcanic island. [133]
Coralline limestone was deposited on an underwater volcanic base; then renewed volcanic activity was followed by intermittent uplift, and later tilting which made the east and south sides higher than the west and north ones. Hence the combination of coral rock, soft volcanic tuff and volcanic soil which Cook describes in these last two sentences, and the landscape he describes further on. Parts of the island were naturally very fertile. To the tributes printed in II, p. 260, n. 4 may now be added one from Edgar. 'This little Island may be stiled the Montpelier of the Friendly Isles—the Land is higher than any of the others, and affords some of the most Romantick & beautiful Valleys in the World the greatest part of this Island is not planted the Earth or Soil of which bears the Strongest resemblance to r[illegible] Ocre—tho' there is great abundance of every thing for it's inhabitants the Walks are enchanting and the whole Island is a little Paradise.'

[2] It was an *asi*, or 'rest-mound', a mound built for a particular chief, in some advantageous spot, where he might take his ease, and recreate his spirit with the view, which [823]
Cook goes on to describe. Sometimes the ownership would lie in the whole chiefly family. [565]
The Tongans were very conscious of natural beauty, as well as of the pleasure of cooling breezes.

[1777]

648 distance from the land. These men told us that the Canoe we had
seen, in which two of them came from Tongatabu, had brought
orders for us to have a certain number of hogs from Eaoowe or
Middleburg and that in two days the King and other Chiefs would
be with us and therefore desired we would return to our last station.
There was no reason to doubt what these men told us as they came
off with no other view, but as we were now clear of the land this was
[439] not sufficient inducement for me to return. And more especially as
we had got such a stock of hogs and roots on board as would run
near to last us to Otaheite; for we got a good quantity of yams at the
last island which were purchased cheifly with small nails; our stock of
hogs was also considerably increased, but had the Cheifs of Tongatabu,
whose property they mostly were, been with us we had undoubtedly
got many more.

At the approach of Night, finding we would not return, these men
439 left us as also some others who had come off in two Canoes with a
few Cocoanuts and shaddocks to exchange for what they could get.
121 Thus we took leave of the *Friendly Islands* and their Inhabitants after
a stay of between two and three Months, during which time we lived
123 together in the most cordial friendship, some accidental differences
its true now and then happened owing to their great propensity to
thieving, but too often incouraged by the negligence of our own
123 people. But these differences were never attended with any fatal consequences,
to prevent which all my measures were directed. Also
during this time we expended very little of our Sea Provisions but
122 lived upon the produce of the islands; and beside the oppertunity of
leaving the Cattle before mentioned amongst them, those designed
for Otaheite received fresh strength; so that upon the whole the
advantages we received by touching here was very great, when it is
considered that the Season for proceeding to the North was lost before
I steered for these islands.

The best articles for traffick are Axes, Hatchets, Togies, that is a
439 Iron tool made in emmitation of one of theirs which they call by that
name,[1] it is like a plain[2] iron only it aught to be four times as thick.
Nails from the largest spike down to a 10^d, Rasps, Files and Knives
which are much sought after. Red Cloth and Linnen both white and
Coloured; Looking Glasses and Beads, of the latter blue are in the
hig[h]est esteem and white in the least: a String of large blue beads
would at any time purchase a hog.[3] But it must be observed, that

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[1] *taki.*

[2] i.e. plane.

[634] [3] 'large beads of which the blue colour bore many Hund^d P Cent greater value than any other, but this preference to the blue was arbitrary, & happend to be the fashion, for on our first arrival at Annamooka they were indifferent as to colour, but Feenow's fondness

what is merely Ornaments may be highly valuable at one time and 439
not so at a nother. When we first arrived at Anamoca the people
would hardly take them in exchange for fruit, but when Feenough [634]
arrived they rose in their Value to what I have just mentioned.

For some of the above mentioned articles every refreshment may [634]
be procured that the islands produceth and which is Hogs, Fowls,
Fish, Yams, Bread fruit, Plantains, Cocoanuts, Sugar Cane and in 433
general every[thing] that is to be got at Otahiete or the Society isles. [439]
Their Yams are excellent and when grown to perfection keep very
well at sea; but their Pork, Bread fruit and Plantains altho very good
are nevertheless much inferior to the same articles at the Society
isles. Good Water a very Matirial article to Shipping is scarce at all 312
these islands, its true it is to be found on them all but then it is either
too inconsideral or ilconvenient to come at: but sence they afford
plenty of Provisions and Cocoanuts one may very well despence
with[1] such Water as is to be got and if one is not over nice there will be
no want. While we lay at Anchor under Ogodoo, some people from 133
Oghao informed us, that there was a Stream of water in that island
which came from the Mountain and run into the Sea on the sw side [312]
of the island where there was anchorage, that is on that side facing
O'tafoa, an island remarkable by having a considerable Volcano in
it which burnt Violently all the time we were in its neighbourhood.
Oghao and O'tofoa are also remarkable on account of their height: [324]
it is from the latter they get the black Stone on which they make
their hatchets and other stone tools.[2]

Under the denomination of *Friendly Isles* we must include not only 101
Happi which I visited but all those that have been discovered nearly
under the same Meridian to the North,[3] as well as some others which
have never been seen by any European but are under the Dominion
of *Tongatabu*, which is the Capital (tho not the largest) and seat of
Goverment. If we credet the Inhabitants this *Archipelago* consi[s]ts of
One hundred and fifty three islands,[4] some indeed are mere spots and
without Inhabitants, and others must lay in Groups like those about

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for blue made it the fashionable one, & all others were in a Manner despisd; Green & red
however latterly began to rival it. Red cloth or bays was also much esteem'd, & linnen. [439]
. . .'—King, 17 July.

[1] *despence with*, in the sense here, I think, of 'put up with'.

[2] There was naturally a plentiful supply of basalt on the volcanic Tofua.

[3] Cf. II, p. 449, where Cook virtually settles the limits of the Friendly Islands.

[4] Cf. p. 100 above. 'We have the names of 120 diff^{t} Islands & many have reckon'd by small stones 150: amongst these are doubtless, included every small spot, but there are 12 which they say are high like Eōōa & thirty seven large, of their size we can only judge in general from their deeming Anamōōka a small Island & Tonga-tabōō a large one, but amongst all this Group, there are three, which by many accounts, & being frequently mention'd are full as considerable as Tonga-tabōō; these are Va'vaōō, Hamóá & Fēēgēē. . . .'—King, f. 87.

F

569 that it almost reach[ed] his shoulder. The red feathers so often men-
tioned in this Narrative all come from Fidgee, as also some of their
499 finest Striped and chequered Cloth and a few other articls. The
demand for feathers is so great that it frequently occasions quarrels
[721] for if the people of Fidgee refuse to Trade, the others rather than go
without will fight for them, so at least I have been told. Now I am
266 again with Canibals, let me ask those men who Mentain that the
want of food first brings men to this Custom, what it is that induceth
them to keep it up in the midst of plenty? As these people have no
804 method of Measuring the distance from island to island but by the
805 time required to sail it in one of their canoes it was necessary to
know or at least to form some judgement how far they can sail in a
502 moderate gale in any given time. With this View I went on board
one of them when under sail, and by several tryals with the log found
she went Seven knots or mile in an hour, close hauled in a gentle
502 gale. From this I judge they will sail on a medium with such breezes
as generally blow in their sea about seven or eight miles in an hour;
805 but the length of each day is not to be reckoned at twenty four hours,
for when they speak of one days sail, they mean no more than from
the evening to the Morning of the same day,[1] that is ten or twelve
hours at most. And two days sail signifies, from the Morning of the
first day to the evening of the second and so for any other number of
502 days. In these Navigations the Sun is their guide by day and the
Stars by night, when these are obscured they have recourse to the
points from whence the Wind and waves of the Sea come upon the
Vessel. If during the obscuration both the wind and the waves shift
(which seldom happens at any other time within the limets of the
trade wind) they are then bewildered, frequently miss their intended
port and are never heard of more.

Of all the harbours and Anchoring places I have met with about
504 these islands that of Tongatabu is by far the best, not only from its
133 great security but for capacity and the goodness of its bottom. The
risk we ran in entering it from the North ought to be a sufficient
caution never to attempt that passage again with a Ship of burden,
sence the other is so much more easy and safe. To sail into it by this
eastern Channel, steer in for the NE point of the island and keep a
long the North Shore with the sm^{l} isles on your Starb^{d} till you are the
length of the east point of the entrance into the Lagoon, then edge
over for the reef of the isles and follow its direction and it will Con-

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[1] Cook has evidently slipped here, and intended 'from the morning to the evening': the correction was thus made in *Voyage*, I, p. 376. The Log, Adm 55/111, has a marginal pencil note in an eighteenth-century hand, 'should be vice versa'.

seem to regard it. As we saw no signs of its bad effects, probably their way of living greatly abates its virulency. We observed several 164 who had ulcers upon different parts of their bodies, some of which had a very virulent appearence, particularly those in the face which were shoking to look at; on the other hand some seemed to be cured and others in a fair way, but this was not effected without the loss of the nose or best part of it. But this cannot be the effect of the Veneral as they were subject to it before the English vesited them, unless they had the veneral desease before which they say not.[1]

Traffick No Nation in the world understand Traffick or Barter which they call *Fagatou*[2] better than these people, neither 439 are there perhaps any Indians that traffick with more honisty and less distrust, we could always trust them with our good[s] to hand one to another to examine and they put the same confidence in us; if either party repented of the bargen the goods were reexchanged with mutal consent on both sides. At first we imagined their knowlidge of trade might rise from their traffick with the neighbouring islands, or [438] with one another; but we were afterward assured that they had little or no traffick either amongst themselves or with any other islands except Fidgee from which they get red feathers and a few other articles mentioned before. It is at this island those few earthen Vessels we have some times seen among them are made.[3]

Manufacture The principal Manufacture in these islands as well as many other in this sea is their cloth, the making of which is 287 very minutly discribed in Hawksworths Voyages Vol. 2, page 210.[4] But though this Cloth is made of the same Materials as that at Otaheite yet it is of a different nature and the latter part of the process in making is different. After the layers of bark are properly cleaned, they are placed one by the end of another till they are a yard or at the most two yards in length, but seldom bro[a]der than the layer of bark which is about three or four inches. When the fibres are adhered together it is ready for the Mallet with which it is beaten on the smooth side of a piece of wood in the same manner as at Otahiete, till it is as thin as Coarse Gause. Very often they take the layers of

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more than one. The *sinifu*, or concubine, had a regulated position and recognized rank. [595]

[1] Once more, from this description, one suspects yaws. But skin ulcers, extremely unpleasant to look at, might arise from a variety of causes in the islands, even from an untended cut or coral scratch.

[2] *fakatau*.

[3] Cf. II, p. 265, n. 6. Twentieth-century archaeology, it may be added, is finding traces of the potter in the most unlikely islands.

[4] From Banks's description; see also Banks's *Endeavour Journal*, I, pp. 359–60. Cook's own brief description will be found in I, pp. 132–3. The journal-keepers found it very hard to refrain from describing *tapa*-manufacture; and indeed it is a fascinating thing to watch. The Tongans are still extremely adept.

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times the size of the largest we had yet seen. The islands almost
incircled us now and we tack'd standing to the NE, but at five stood 114
back again, soon after which two Canoes one with four & the other 193
with three men paddled towards us and came along side without the
least hesitation. They brought some Cocoa nuts, Bread fruit, plan- 609
tanes and sugar cane which they gave in exchange for small nails and 439
knives. One of the Indians came on board and when they left us
another Canoe came but did not stay long as night was approaching,
for the nearest island was five or six miles off which was that with
three hummocks, and sufficiently shows the hazard these people
would run to posess a few of our triffling articles. We sounded at this 114
time and had 40 fathom but soon after only 17, on which we made
the signal for the Discovery to anchor which we did about six o clock
in a bottom of coarse Coral sand with bits of shells.

TUESDAY 29. *Therm.* 75½:76½:80½:79:78:76½. The wind about N 132
except part of the forenoon when it chang'd suddenly and came from
WSW with a great deal of heavy rain. The rest of the day moderate
breezes with the weather dull or cloudy and a sultry air. About five in 609
the morning we sent two boats to the nearest island which lay in our
way and was that mention'd last night, that they might purchase 439
vegetables and meet us as we came up to it. Soon after we weigh'd
and stood towards it but made several tacks as the wind was foul, in
which time six or seven canoes came from different islands and
brought bread fruit, plantanes and yams which they exchang'd as
yesterday evening. They also brought several fowls, a great many [431]
shaddocks, and an old man who had been on board last night made
the Captain a present of a pretty large hog. Besides these they also [136]
exchang'd pieces of cloth, fish hooks, small baskets, musical reeds and
some clubs, spears and bows, as well as some large wood Pigeons,[1] [223]
small rails[2] and large violet colour'd Coots.[3] They retreated when the
rain was violent, about which time one of our boats return'd with a
considerable quantity of bread fruit, yams, plantanes and some grass
for the cattle. The other return'd soon after noon with more vegetables, some fowls and seven young hogs, so that altogether we had
procurd as much bread fruit and other Vegetables as serv'd our
people to day, which with an addition brought by several more
Canoes in the afternoon also ennabled us to spare some to the Discovery and reserve enough to ourselves for another day. Our people
were very civilly treated by the Indians at the island, who sold them
the bread fruit for a bead each and the hogs for a small hatchet

[1] *Globicera pacifica.*

[2] The Spotless Crake, *Porzana tabuensis.*

[3] *Porphyrio melanotus.*

609 apiece, but bunches of plantanes or fowls were purchas'd for
439 middling siz'd nails. The inhabitants were not numerous and their
huts which were collected together and stood within a plantane walk
361 but indifferent: not far from them there was a pretty large pond of
312 fresh water, which was tolerable though not equal to what we commonly
meet with in streams, of which there was not the least
114 appearance. Between two and three in the afternoon we pass'd this
133 island, the higher parts of which are not wooded and seem to be
[137] uncultivated, but it has notwithstanding a pleasant appearance. We
pass'd near a reef or shoal that lyes to the SW of it and in the evening
were abreast of Annamocka, but being three or four miles to leeward
kept turning up as we had no soundings with less than 40
fathom which made it inconv[en]ient to anchor. The bottom was
rocky & we had sometimes 55 fathom but at eleven at night 50 with
the same sort of ground.

132 WEDNESDAY 30th. *Long.* TK 184.41 E. The wind from ENE to N and
NbW. Moderate breezes and sometimes gentle or almost calm. The
weather dull with a great deal of rain early in the morning and some
114 in the afternoon. A swell from the SW. Before day light we continued
to make short boards and when that appear'd were nearly in the
same place as last night, but soon after as there was but little wind we
[133] fell more to leeward. When the breeze sprung up we stood in and at
eleven in the forenoon were near the shore of Annamocka eete[1] or
little Annamocka, off which lye some shoals on which a high surf
broke. We afterwards made several tacks and as the wind became
more favourable in the afternoon we lay up for the anchoring place
at Annamocka, but it failing us in the evening we anchor'd in 42
fathom coral sand and shells about two miles off shore at the WNW
114 part of the island. In the forenoon we saw two islands to the NWtward
which are those call'd Kaybay and Mattafóá[a] in Abel Tasmans plate
133 of Annamocka, where they are represented too small. The one is a
[103] single mountain of a Conic figure which has a noble appearance, and
the other is pretty long and flat on the top though much higher than
any of the neighbouring isles (except that just mention'd) or indeed
439 of any we had yet seen between the tropics. All the day we had
several canoes, sometimes near twenty, about the ship from whom we
purchas'd a great quantity of vegetables and about a dozen small
hogs and pigs besides many fowls. Our trade was brisker today as

[a] Their names as told us by the natives are 'Káò and To'fooa. [Kao and Tofua.]

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[1] Nomuka Iki.

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some orders were issued out by the Captain to prohibit every person 439
from purchasing any thing but provisions, and also appointed proper
people for that purpose. While working up towards the island in the 114
day we had from 41 to 49 fathom with a bottom of broken shells and
black sand. 133

[MAY 1777]

THURSDAY MAY 1st. The wind ESE. Moderate breezes with dull 132
cloudy weather and some showers of rain. Early in the morning the
Master was sent in the Cutter to examine the SE part[1] of the island and 114
in the forenoon returnd with an account of there being good anchoring and landing, but there was no water near except a small stagnant
Pool and a few holes dug in the sand which had both a very indifferent
sort. In the mean time we had weighd and work'd close in shore, but
determin'd now to reach the anchoring place which Captn Cook had
occupy'd when at this island in 1774, which though at a small distance took us till four in the afternoon before we got up, which was
occasion'd by a tide or current that seem'd to set right off shore. We
anchor'd in fathom a sandy bottom not a mile from the shore
on the NNW part of the Island. Soon after day light several Canoes 609
came off and at one time we had near forty about the ship, besides 501
two large sailing Canoes that carry'd between forty and fifty men
each. We purchas'd a great quantity of vegetables and in particular 439
had more bread fruit than we could use, and several hogs & fowls in
the same manner as on the preceding days, but were oblig'd to punish
one of our people who already infring'd the articles made to regulate
our bartering. There were several women in the Canoes that came off [562]
to day who were perhaps incited by curiosity to visit us, though at the [609]
same time they barterd as eagerly as the men and us'd the paddle
with equal labour and dexterity. The Discovery anchor'd a little 114
before us though once far to leeward.

FRIDAY MAY 2d. The wind E or Ebs with cloudy weather and some 132
showers of rain. In the morning we hoisted out the Launch and other
boats and in the forenoon the Captain went on shore and agreed 648
with the natives for the use of a hut or shed to serve as a tent and also
for procuring water. In the afternoon the horses were sent on shore
and at the same time a party of marines under the command of Mr
King, who kept gaurd in the shade for the protection of the horses
and waterers. To strengthen our party some were sent from the Discovery, and a signal agreed on between that ship and those on shore

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[1] Cook says 'to Sound the SW side'.

648 in case any disturbance should happen with the natives, because she
lay quite abreast of the S^o^most sandy beach whereas we were rather
609 to leeward of it. There was however little reason to expect such an
accident as they behav'd in the most civil manner to us (if we except
685 their attempting to thieve every thing) and many came off and
439 barterd hogs and Vegetables, though not in such numbers as when
standing off and on, as their attention was much taken up to day
with our boats going so frequently on shore.

132 SATURDAY MAY 3^d^. The wind N . Mod^t^ breezes. The weather fine
with some showers in the afternoon. Our people employ'd watering &
648 another party in cutting wood, both which the chief who is nam'd
Taipa agreed to. Many of the natives traded at the ship and on shore
439 exchanging their fruits for nails & beads as before. They also asissted
in rolling down our water casks but they seem'd to understand Trade
so perfectly that they would not do or give the smallest triffle unless
they were paid.

114 SUNDAY 4^th^. The wind W. Moderate breezes with fine weather. The
[132] people employed in wooding and watering and a party in cutting
[439] grass for the Cattle. The indians continue to Barter their fruits but
very few hogs are now brought, though several Canoes have come
[133] from the other islands. The Discovery lost her small bower anchor not
from any wind or sea but the foul ground which is probably coral
rock.

[132] MONDAY MAY 5^th^. The wind westerly. Gentle breezes with fine
137 weather. The people employ'd as before, but several of the party who
were wooding sufferd greatly from the juice of the trees which they
[114] cut down, as it is so acrid that when they wip'd their face with their
hands it inflam'd their Eyes so as to make them incapable of working
& had the same effect on some other parts. They erroneously suppos'd it to be Manchineel for it is a species of Pepper and grows
plentifully every where towards the shore. The trees are of no great
size & the twigs when broke distill a great quantity of a milky juice.
[824] It is calld Fait'anoo[1] by the natives & may easily be known by trying
if it has the milky juice or from its rounded leaves almost like a [2] tree.

114 The Discovery found her anchor again, but her misfortune made
us examine one of our Cables which we found unhurt. The Gunner
439 was employ'd as usual in bartering on shore for provisions & purchas'd a good many Yams and several hogs which came from some of
643 the other isles. We found that though Taipa or Kaipa was the person

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[1] Feta'anu, *Excoecaria agallocha*. It is common in Tonga in thickets near the sea.

[2] 'Manchineel' was presumably the word that slipped Anderson's pen.

who acted chiefly on the part of the Indians, he is not chief of the 643
island but another person nam'd Toobou. We plainly saw the smoke 634
rising from Toofȯȧ which is a volcano but it was constantly varying 648
in quantity and seem'd to proceed from near the middle of the island.

TUESDAY MAY 6th. The wind SSE. Gentle breezes with fine weather. 133
The people employ'd in looking at the other Cable and steadying the 132
ship from swinging in shore with another anchor. The rest employ'd 114
as usual. Few Canoes off to day but trade was carried on as before on
shore. 439

The Captn brought off a person nam'd Fee'nou who says he is chief
of the Island Tonga'taboo or Amsterdam. We found he arriv'd 634
yesterday and was probably sent to as soon as we arriv'd, for his [576]
consequence seems much greater than that of any person here as they
pay him the greatest respect, and many as a mark of submission bow
their head and touch the sole of his foot with it afterwards, doing the
same with each hand, first with the palm and then the back part. He [142]
is a tall man about 30 but rather thin, and has more of the Europæan
features than any we have yet seen here. The Captain presented him [648]
with a gown of printed linnen and some other things to engage him
in our interest which he was well pleas'd with.

WEDNESDAY MAY 7th. The wind SSE. Moderate breezes with fine 114
weather. The people employ'd as usual and the Indians continue to [132]
trade though not so briskly as formerly. The Discovery on heaving [439]
short to shift her birth into better ground lost her best Bower anchor
and had near fallen on board of our ship, as they got foul of our Cable
in bringing her up, but afterwards got clear and anchor'd a quarter
of a mile or more to the westward of where we lay & rather farther in.

THURSDAY 8th. The Thermometer at noon . The Barometer . The wind .

FRIDAY MAY 9th. The wind Etly. Fresh breezes with fine weather. [132]
An Indian of some consequence who was with Fee'nou stole 648
[1] on board for which he was severely flogg'd, then had his [685]
hands tied firmly behind and was carry'd to the place where we traded on shore but not releas'd till a large hog was brought for his ransom. I am far from thinking there was any injustice in punishing this man for the theft, as it cannot be determind what might be the consequence if such practices had been permitted, but that he should be confin'd in a painfull posture for some hours after, or a ransom demanded after proper punishment for the crime had been

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[1] According to Cook, he stole 'the bolt belonging to ye Spun yarn wench'.

648 inflicted I believe will scarcely be found consonant with the principles
of justice or humanity upon the strictest scrutiny.

114 SATURDAY MAY 10th. The wind from E to NNE. Fresh breezes with
cloudy weather and a considerable swell so that no Indians came off
[132] today, but they continued to trade on shore and amongst other things
[439] we bought a hawks bill turtle of about 30 Lb weight.

[132] SUNDAY 11th. The wind SSE. Fresh gales with cloudy weather before
noon and some rain, thunder and lightning in the morning but afterwards clearer and more moderate. No Canoes came off the weather was so bad. In the forenoon we got off the horses and in the evening the other things with the party of Marines, three of whom were punish'd on shore for negligence. On heaving in the best Bower the service was found broke and the Cable a little damag'd.

[132] MONDAY 12th. The wind SSE. Fresh breezes with pretty clear weather.
We should have left the Island but waited for the Discovery who has
attempted to recover her anchor yesterday and today, but in vain as
[439] it got hold of a rock and the weather has been bad. Few Indians came
off as they seem to have exhausted the greatest part of their stock for
trade.

[132] TUESDAY 13th. The wind from SE to E. Moderate breezes in the forenoon and afterwards almost calm. The weather fine. The Discovery
[533] after a good deal of trouble recover'd her anchor. Few of the natives
[535] came off but at night we could hear them engagd in singing and
dancing on shore as if a great number had been collected together.

[132] WEDNESDAY 14th. The wind SSE and S. Gentle breezes with very fine
weather. Between seven and eight in the morning we weigh'd and
648 left Anamocka or as the natives pronounce it Anna'mooka. This
island (as well as Amsterdam & several of the adjacent ones) was
discover'd by Abel Tasman in 1643, who considering the time he
131 staid has given a tolerable account of it. Its situation is in 20.14 S
Latitude, 185.30 E Longitude, and is about four leagues or more in
133 circuit being nearly of a figure. It is somewhat higher
than the other small isles that surround it but may nevertheless be
rank'd amongst the low islands.[a] The shore at that part where we lay

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[a] As the different heights of land may easily be misunderstood from the deficiency of terms we use in expressing their various degrees I shall endeavour to explain what I mean by low & other lands. By low land I mean that which is about the height of the English coast about Essex, or what is a general criterion, that on which the trees where there are any appear above water as you approach it before the body of the land is so apparent as to determine its extent. When I say land is of a moderate height I mean that it is as high as the English coast about the Downs of Kent & Sussex, or indeed of the whole southern coast as far as Plymouth. I know no part of the English coast to the E or S^o^ward to which I

55: Anderson D,T-5 (1777) 1967 OU9 Tonga OU9

245 in the open plantane fields. The bread fruit and Cocoa nut trees are
[41] interspers'd with little order though chiefly near their habitations,
and the other parts of the island, especially towards the sea and about
[244] the sides of the lake are cover'd with trees and bushes of a most
luxuriant growth, the last place having a great many mangroves &
the first a vast number of the Fait'anoo trees already mentioned.
133 There seems to be no rock or stones of any kind about the island that
is not coral, except in one place to the right of the sandy beach which
is the highest part of it, where there is a rock twenty or thirty feet
high of a calcareous stone of a yellowish colour and a very close hard
texture, but even about this place are large pieces of the same coral
rock that composes the shore.

648 We liv'd on the most friendly terms with the natives while we
remain'd here, and obtain'd a much larger supply of refreshment
609 than could have been expected from so small a place, but it should be
[439] consider'd that all the small islands around it furnish'd their Quota,
[342] and the strangers that brought their hogs and other things were
oblig'd to live in temporary huts which they erected or lay them-
[136] selves down behind bushes or ferns. Besides walking frequently in the
country, which we were permitted to do without any interruption,
we sometimes amus'd ourselves in shooting wild ducks not unlike the
Widgeon[1] which are very numerous upon the salt lake and the other
648 pool. In these excursions we found the people had often deserted their
houses to come down to the trading place without entertaining any
609 suspicion that strangers rambling about would take away or destroy
439 any thing about them, but though in these cases it might be suppos'd
161 a great part of the inhabitants were sometimes collected at the beach
162 it was impossible to form any true computation of their numbers, as
the continual resort of strangers from other places mixing with them
might easily mislead one. However as there was never to appearance
above a thousand seen at one time it would perhaps be sufficient to
allow double that number for the whole island.

114 We steerd about NNW towards Kâó and Toofòá in our way to
Hapaee,[2] an island which Fee'nou said was of a considerable extent,
634 where we could be supply'd plentifully with every refreshment in the
[648] easiest manner. He engag'd to go to this place with us himself and
seem'd to have some interest in it, for he express'd a good deal of
aversion to the Captains intention of going to Amsterdam which he
133 mention'd to him. Although they made us understand that Hapaee
lay rather to the NE of Anna'mooka, we were obligd to take this route
114 because there is a cluster of islands lying between Annamooka &

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[1] *Anas superciliosa.*

[2] Ha'apai.

A [Nomuka--Analyst]

Too'fôà, which is the farthest we could see to the NW^{t}ward, that are 133
seemingly encumbered with reefs and shoals and perhaps do not
afford a passage for large ships as the Indians seem'd to hint. Several 114
Canoes follow'd us a considerable way to trade and one man who was 648
on board stole an iron Crow which was perceiv'd by some of our
people, but he immediately got into a Canoe and went off. Feenou 685
sent & recover'd this but as it was suspected he had stole something [439]
else, two or three muskets were fird at the Boat he was in though none [634]
of them hit, and after that a four pounder which had no better
success.

The chief left us before dinner and went in a large sailing Canoe 634
which had brought him from Amsterdam towards some of the
islands mention'd above, which we were now almost a-breast of. The 103
names of these as they lye in order begginning with the S^{o}most were
told us by the natives and are as follows, though perhaps their true
situation differ'd from the apparent one we now had in view.[1]

Fo'nooee,fooa [Fonoifua]
Fonooa,eeka [Fonuaika]
+O'ooa ['O'uka]
+Noogoo'laiee [Nukulai]
Looa'nammo [Luanamo]
Fo'ooa [Foua]
+Fotoohàà [Fotuha'a]
+Ha'faiva [Ha'afeva]
+Toong'ooa [Tungua]
+'Keeto [Kito]
+'Kotoo [Kotu]
Foonoo'eia [unknown]
Lootoo'aigee [Lutueki, a flat-topped rock]
Fatoo,man'ogee [Fatumanongi, a flat-topped rock]
+Kàô — The high Conic isle [Kao]
+Toofôà — The flat Volcano isle [Tofua]

These islands lye scatterd at unequal distances and are in general 133
nearly as high as Annamooka, but only from two or three miles to
half a mile long & some scarcely so much. They have either steep
rocky shores like Annamooka or reddish cliffs, but some have sandy
beaches extending almost their whole length. They are entirely [137]
cloath'd with trees amongst which are many Cocoa palms, and each
forms a prospect like a beautifull garden plac'd in the sea, to heighten
which the serene weather we now had contributed very much & the

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[1] To save a series of footnotes, I give the present forms of the names of these islands in the text in square brackets. With the exception of the two last and of Fotuha'a they all belong to the Lulunga or Kotu group. The three exceptions belong to the Ha'apai group.

Fotoo'hâà[1] we steered NE and sometimes more northerly but made little 114
progress, so that it was about five in the evening till we reach'd two
shoals[a] that lye to the eastward of Nee'neeva,[2] the next island to 103
Fotoo'hâà and scarcely more than two leagues from it. We then
tack'd and stood again to the westward when we had soundings with
fifty three and forty seven fathom in a coral sandy bottom, though
not long before we had no ground with seventy fathom about four
leagues east from Kâò.

We saw several more Islands to the eastward today and some land 114
whose extent could not be well determin'd, which we suppos'd to be
the Island we were directed to by Feenou. Several Canoes came from
the different islands near us to barter their fruit, and Fee'nou who [439]
had been at one of them all night came accompanied by two more [634]
large Canoes and brought two hogs, some plantanes and Cocoa nuts [431]
as a present to the Captain but return'd in the evening. In the night
we could plainly see flames issuing from Toofòà though to no great [133]
height, and in the day though it smoak'd considerably at other times it
almost ceas'd.

FRIDAY 16th. *Lat.* DR 19.42 S. *Therm.* 73¾:75:78¼:78:75:74. The 132
wind varying between SSE and SE. Gentle breezes with fine serene
weather and temperate. The sea quite smooth. In the night we made 114
short boards just to keep our station but at day light stood E close
hauld, when we saw the land discoverd from the mast head yesterday 133
afternoon, bearing EbS, and could judge it to be low from the trees
only appearing above the water. About nine we could see it plainly,
forming three Islands nearly of an equal size, and soon after a fourth
to the southward of these as large as the others. Each seem'd to be
about six or seven miles long, and of the same height and appearance,
lying in a bending direction from North to south. The northermost 131
of these is call'd Hâ'ano,[3] the next Fòà,[4] the third Lai'fooga[5] and the 103
southermost Hoo'laiva,[6] but are all included in the general name
Ha'paee by the natives. There is likewise a small isle to the Etward
of Hoo'laiva call'd Ta'taffa,[7] one lying to the westward of Ha'ano
call'd Loo'hoggo,[8] and another between Ha'ano and Fòà but farther
on to the eastward call'd Noogoo'nammo.[9] About ten o clock we
pass'd to the southward of two other islands, the first calld Mang'onne[10]

[a] in passing between these shoals and Fotoo'hâà we sounded but had no ground with seventy fathom.

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[1] Fotuha'a.
[2] Niniva.
[3] Ha'ano.
[4] Foa.
[5] Lifuka.
[6] Uoleva.
[7] Tatafa.
[8] Luahoko.
[9] Nukunamu.
[10] Mo'unga'one.

SUNDAY 18th. The wind E . Moderate breezes with good weather. 114
The Gunner was employ'd to trade on shore and purchas'd a good
many hogs, plantanes &c but the greatest supply we had was a 439
present which Fee'nou made the Captain of a vast quantity of Yams, [634]
Plantanes, Sugar cane &c and two hogs, which was shar'd between
the two ships. Amongst other things we purchas'd yesterday a fine [431]
green Turtle of above 300 Lib., & to day the decks were so crowded [648]
with the natives who came to barter or were incited by curiosity that
it was almost impossible to stir. [609]

MONDAY 19th. The wind Easterly. Gentle breezes with fine weather. [132]
We continued to barter with the natives on shore as yesterday and a
great number were on board.

As we wanted to obtain some knowledge of the country some of us 609
mention'd it to Fee'nou, who sent a person as a guide and to protect
us from any insult from the natives. We travers'd nearly the whole 114
island of Lai'fooga and found it in several respects superior to Annamooka.
The plantations were both more numerous and extensive and 311
we found large spots well planted with the Morus papyrifera (paper
Mulberry),[1] but in many places towards the sea, especially on the east
side, the country is still waste owing perhaps to the sandy soil, as it is
much lower than Annamooka or its surrounding isles. Towards the [134]
middle of the island the soil is better and much better inhabited than [162]
the other parts, for we met here with very large plantations, fenc'd in
in such a manner that the fences running parallel to each other form'd [241]
fine spacious roads that would appear an ornament in the most [417]
civilizd countrys. It however labours under the inconvenience of [487]
having no good water that we could see, for though we found several
ponds the water was either very brackish or stinking, and in some 312
large holes in the coral rock which is seldom above two or three feet
from the surface it was no better than common sea water. At one 223
place we saw an artificial mount rais'd to a considerable height with
an arbour of low trees neatly contriv'd, under which our guide made 349
us understand people sate to catch pigeons.[2] At another place was a
house four or five times as large as the common sort with a large area 344
of grass before it which seem'd a place for the people to resort 764
publickly to;[3] and near the landing place we saw one of their burying 349
grounds, which was a mount two or three feet high coverd with
gravel and had four or five small huts on it, in which they said the
bodys of some of their principle people were interr'd.[4] Most of the 000

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[1] *Broussonetia papyrifera*, Tongan Hiapo.

[2] One of the mounds called *sialupe*.

[3] Tongan *mala'e*.

[4] A *fa'itoka*.

535 These two last dances met with universal approbation from the
533 spirit and exactness with which they were perform'd. The spectators
who were no doubt perfect judges of the propriety of the several parts
517 could not withhold their applauses at some particular ones, which
indeed might be observ'd by a stranger who never saw the diversion
before: for though through the whole the most strict concert was
observ'd it might be said that some of the motions absolutely spoke
the Language that accompanied them, if we allow there is any con-
535 nection between motion and sounds. At the same time it should be
533 observ'd that though the musick in the chorus and that of the dancers
correspond, yet constant practice seems to have a great share in
effecting the exact time they keep; for if any of them are accidentally
interrupted they never find the smallest difficulty in entering upon
any part of the dance or song, and their perfect discipline is no where
better shown than in the sudden transitions they make from the ruder
motions and harsh music to the soft airs and gentle motions.

The place where the dances were perform'd was in an open space amongst the trees just by the sea, with lights at small intervals in the inside of the circle. The concourse of people was pretty large though not equal to what assembled in the forenoon when the marines excercisd, at which time some of our Gentlemen guess'd there might be about five thousand, others a great many more and some fewer.

132 WEDNESDAY 21st. The wind W in the morning in fresh breezes with
cloudy weather and some rain, but afterwards clear with gentle
breezes from the S^{o}ward but at night brisker. This change of weather
seem'd to be indicated by the great heat for two days past and the
● [439] Lightning to the westward last night. Few of the natives on board and
little trade for provisions carried on.

132 THURSDAY 22d. The wind Southerly. Gentle breezes with fine
weather. A good many Indians on board but little trade for provi-
439 sions. We confind two Indians for stealing
648 one of whom had a large wound on his cheek made with a boat hook
by one of our people who was sent in pursuit of them.

132 FRIDAY 23d. The wind SSW in the morning and afterwards SE.
Moderate breezes with fine weather. A good many Indians on board
439 who brought some fruit and hogs, of the last of which we have such a
634 number that we are oblig'd to salt them, and Feenou set out for
648 Va'vaoo this morning to bring another supply, perhaps to prevent
our going to Amsterdam which he is still averse to. The two Indians
648 were reliev'd on bringing a hog as a ransom, but their boat was

detain'd untill they should bring another which they had promis'd 648
yesterday.

SATURDAY 24th. The wind E. Moderate breezes with fine weather 132
but at night calm with rain. Our boats were employ'd in watering
to day which they took from a pond of a bad sort near the point to 114
the right of the anchoring place. A spit runs out from it round which the boats must go or else the casks must be rolld over a reef on the nearest side.

A report was spread about by some of the Indians that a Europæan
ship had arriv'd at Anna'mooka since we left it, which gain'd ground 648
so fast that the Captain went on shore in the afternoon in quest of the man who it was said had brought the report: but he could get no certain intelligence and one man who it was said left it only this morning flatly denied it, though it seems the other was so particular as to describe the size of the ship & said there had been a boat on shore from her at the watering place.

SUNDAY 25th. The wind s or sbw. Moderate breezes with fine 132
weather. Few Indians have come off these two days and their spare
provisions seem almost exhausted, as they bring few things to sell 439
except their houshold furniture such as Matts, cloth, baskets &ca.

MONDAY 26th. The wind ESE and Ebs. Gentle breezes with very fine 132
weather. In the morning we unmoord and at eleven in the forenoon
weigh'd and saild along the West side of Laifooga nearly sbw 114
(an[d] ssw?) about two miles off, passing between some shoals without us and some others that lay nearer the shore where there are good soundings from twelve to fifteen fathom. Between twelve and one we bore away a little for a shoal near the s end of Laifooga, but afterwards hauld up for the opening between that and Hoo'laiva which are join'd together by a reef as the others. At one we tack'd as there was some appearance of shoal water a-head, and standing in again came to an anchor between two and three off the s part of Laifooga in 18 fathom a coral sand bottom, the point bearing SEbE a mile and a half distant. The Discovery was a considerable time of weighing after us and found much more difficulty in getting up, as it was near dark before she anchor'd and had touch'd on a small Coral rock in her passage.

TUESDAY 27. The wind SE and ESE. Fresh breezes with cloudy weather [132]
and sometimes a little rain. The master was sent with two boats to
sound for a passage to the S°ward between Hoo'laiva and Longa'hoo,[1]

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[1] Luangahu.

114 which is the small isle next to it, that we might go in a direct course
for Anna'mooka and found it safe as far as he went.

On a report of the Indians that Hoolaiva though almost as large
311 as Lai'fooga was neither inhabited nor cultivated I went on shore to
[225] see it, and found their account true, for there is neither the least mark
[226] of culture or habitation upon it except one hut where a person resides
to catch fish and Turtle. It is rather uncommon that it should be in
this situation when that next to it is so perfectly cultivated and the
inhabitants can walk from one to the other at low water, for though
the soil is quite sandy and there is not good water upon it why might
not the Cocoa palms, an article so usefull here (and which thrive in
the midst of sand), be planted or indeed other articles, for it produces
all the trees and plants found in a natural state on the other islands
133 with the greatest vigour. The east side has a reef like Lai'fooga from
whence we could see no island except Ta'taffa, and the west side has
349 a bending at the N part where there seems good anchorage. We found
an artificial mount like that at Hapaee raisd as high as some of the
223 surrounding trees with an arbour upon it for catching Pigeons.

Three large sailing Canoes with people who seem'd strangers has
643 come to the ship, in one of which was a person nam'd Futta'faihe[1] or
Poulaho who said he was chief of Amsterdam & all the islands we
[634] had seen or heard of. On mentioning that Feenou had pass'd as such
with us, he said that he was indeed a person of power in Amsterdam
and often sent on warlike expeditions to the other isles but deny'd his
643 being first in rank. If weight of body could give weight in rank or
142 power Poulaho was certainly the most eminent man in that respect
we had seen, for though not very tall he was of a monstrous size with
[644] fat which render'd him very unwieldy and almost shapeless. He had
straight hair and his features differ'd a good deal from the bulk of the
[576] people; but these differences would not have been sufficient to convince
us of his superior rank had we not seen some marks of respect
paid him to which we were strangers, for on giving him something to
eat two of his attendants fed him and the rest turn'd their backs while
643 he was eating. He made the Captain a present of a hog or two and a
[648] quantity of red feathers which he had heard we esteem'd, and in
return he had a piece of printed linnen and some other things. In the
[431] evening he went on shore to Laifooga, and to show that his corpulence
[501] had not render'd him wholly inactive he took a large paddle with
which they scull in the fore part of the boat and handled it dexterously
[177] enough, but he soon tir'd of the excercise. The Captain went on
shore after him and found that all the people on shore brought in the
[439]

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[1] Fatafehi.

things they had got in trading with us, which he examin'd and 643
enquir'd what they had given for them but returnd all except one [177]
necklace.

This mans arrival sufficiently explain'd the conduct of Feenou and [439]
points out his Character, for it seems to have been his aim all along
to detain us amongst the islands where his authority was superior to 634
that of every other person, and prevent our going to Amsterdam 648
where he knew his true consequence must appear. His objections to 157
our going there when at Annamooka, his directing us to Hapaee and [643]
the diligence he us'd there to procure us a sufficient supply are strong
proofs of this; but finding us still bent on going there he not only set out for Va'vaoo to try if the things he could procure there would alter our purpose, but in all probability he had occasiond the report of the Europæan ship being at Annamooka to be spread—perhaps with an intention of at least delaying our passage to Amsterdam by visiting that place, if not with the hopes that we might by lengthening our time meet with such bad weather as would oblige us to leave the islands entirely.

It would be hard to arraign a man before his purposes are fully known, as people are sometimes oblig'd to act faultily in appearance while their intentions are good. If Feenous motives for preventing our going to Amsterdam were entirely interested, that is if he meant to appropriate every thing he could procure from us to himself, no man would hesitate a moment in condemning him. But if he consider'd that it was a matter of indifference to us where we obtaind a supply, and that he endeavour'd to obtain these things as a proof of his diligence which he might produce on his return, considering at the same time that no more could be had from us supposing we had gone there, his conduct was not only excusable but perhaps laudable, and the methods he took to effect his intentions were sufficient proofs that he was no stranger to good policy when he wanted to recommend himself.

WEDNESDAY 28th. The wind ESE and SEbE. Moderate breezes with 132
close cloudy weather and in the afternoon a constant heavy rain.

There has been few Indians off since we anchor'd here, but we had 643
another visit from Poulaho to day who confirm'd what he said yester-
day of Feenou, ie that he was a person sent often to decide differences [634]
in the smaller isles and made us sensible of his power by saying that
he could kill him if he did not act uprightly. He also mention'd a [644]
woman call'd Chee'nei,ta'kulla[1] that resides at Va'vaoo and is a

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[1] Sinaitakala. Cf. Cook, p. 178 above.

windward and in the evening were close in with 'Kotoo[1] (the next 114
isle to Toofôâ), which with the shoal that lyes to the NW of it and the
other islands mention'd the day we left Anna'mooka form a good [32]
defence from the S^{o}ly wind which now blew, but though we intended [33]
to anchor found no ground with less than fifty fathom close in, so that we brought to with the maintopsail to the mast at six o clock, and also the Discovery, but afterwards stood off and on having scarcely made three leagues to windward all day. In the middle watch this morning one of our people fell from the jib-boom into the sea but luckily caught hold of a rope as the ship had not much way.

Two or three Canoes came off from the islands with some Yams [439]
and bread fruit, though it blew fresh, and the nine whom we have on
board seem not to have the least apprehension of danger from being [821]
drove off by a strong wind or any other accident.

SATURDAY 31. *Lat.* Obs. 19:49:34 S. The wind SE and ESE. Fresh 132
breezes which increas'd to a brisk gale towards night with dark
cloudy weather. A moderate sea. Before day light we stood between
Kotoo and the isles east from it making several tacks so that we kept 114
nearly in our station. At day light we stood pretty close in with it, thinking there might be a passage between it and the reef which is calld Ko'koppo[2] to the S^{o}ward, but being doubtfull about it we bore away round the NW point of the reef (which extends a good way to the SE) and then haul'd our wind. We made several boards in the day but gaind very little, as we only just made the point of the reef again in the evening, & the sea being smoother here we stood in again to our last nights station and made short boards.

[JUNE 1777]

SUNDAY JUNE 1st. The wind ESE and E. Fresh breezes and some brisk 132
squalls in the forenoon but afterwards rather more moderate. The
weather dark and cloudy with a good deal of rain in the forenoon and
afterwards some flying showers. Before day light we stood between
Kotoo and Fotoo'hâá but our coming into this place for smooth water 114
had like to have cost us dear, as we almost run on a shole that lyes to the eastward of a small sandy island with a single bush call'd Pootoo Poo'tooa[3] near Ha'faiva about three in the morning. As it was very dark and blowing fresh we were close upon it before it was perceiv'd so that the only method left to save the ship was to throw all a-back, which being done very quickly she wore round though then to appearance scarcely two or three times her length from the broken

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[1] Kotu.

[2] Hakau Kopau.

[3] Putuputua.

114 water, and we had an oppurtunity time enough to warn our consort
of the danger by firing three swivels.

In the fore noon we attempted to work up towards Hafaiva (which
is the largest isle hereabouts) between Pootoo poo'tooa & a shoal that
lyes NE from Kotoo, but making little progress and the same weather
being likely to continue, we came to an anchor at noon in fifty
fathom a coarse sandy bottom about a mile WbN from Pootoo
poo'tooa, Fotoohåå bearing nearly NNE, Kotoo SWbS, and the shoal
to the NE of it SSE and SE. The Discovery also came to soon after a
[439] little to the NE of us. Several Canoes came off from Ha'faiva with
Cocoa nuts & Plantanes and in the morning we sent the pinnace on
[481] shore to Kotoo with our Indian guests, who were so heartily tir'd of
their short Voy[age] that they had once prepar'd themselves to swim
[262] to it. Their greatest distress was with respect to their food, for they
were not fond of Pork dress'd after our manner and liv'd chiefly on
Yams. In the evening we caught a large Snapper of twelve or fourteen
Lib. and a Grooper of the same size.

132 MONDAY 2^{d}. The wind SE. Fresh breezes with cloudy weather in the
forenoon, but afterwards clearer. In the forenoon the Captain went
648 on shore to Kotoo, which is scarcely accessible to boats from the coral
reefs that surround it. It is not more than a mile and a half or two
133 mile long and not so broad. The NW end is low like the islands of
Hapaee, but it rises suddenly in the middle and terminates in reddish
clayey cliffs at the SE end about thirty feet high. The soil thereabouts
is of the same sort as in the cliffs but in the other parts it is a loose
[311] black mould. It produces the same things as the other islands and is
[162] tolerably cultivated but is thinly inhabited. We saw Annamooka
from the highest part of it and the Capt^{n} thought he perceivd a clear
137 passage about Toong'ooa and the other isles towards that place. Our
people were employ'd in cutting some grass for the cattle and we
177 planted some Melon seeds with which the natives seem'd much
pleas'd and inclos'd them with branches. On our return to the boat
312 we met with two or three ponds of water but it was very salt, and
764 near them was one of their burying places that was much neater than
those which were seen at Hapaee.

Several Canoes came from the different islands to barter their cocoa
439 nuts, plantanes &c and we observ'd that almost all of them as well as
164 the inhabitants of Kotoo were affected with a violent cough and
slight sore throat, which also made its appearance on board for two
days past, perhaps from the sudden change to and continuance of the
bad weather.

[1777]

114 Annamooka bore the island on this side making in two or
three low hummocks. Between eight and nine we anchord in the
same spot we left on going to Hapaee but the Discovery was still
three or four leagues to leeward and did not get up till three in the
afternoon.

439 The Captain went on shore before and after dinner and the natives
to about the number of two hundred assembled on the beach &
traded with as much eagerness, if not more so, than if we had not
[241] been there before. Their stock appear'd to have been recruited much
in our short absence but instead of bread fruit, which was the only
article we could purchase on our first arrival, nothing was to be seen
now but yams & a few plantanes, which shows the quick succession
of the seasons or at least the different Vegetables produc'd at the
164 several times of the year. We found the cold mention'd at Kotoo quite
universal here & seems a disorder they are not much acquainted
634 with. These people in the absence of Toobou whom we left at Kotoo
seem to be under little subordination, for we could not perceive to
166 day that one man assum'd more authority than another. It appears
also that a great many of the principle men and women whom we
saw here at first had come from the other isles, as few or none were
seen now.

132 FRIDAY 6th. The wind E and ENE. Fresh breezes with cloudy weather
in the forenoon but afterwards clearer and more moderate. Very few
439 Indians came off to the ship but they traded on shore as usual, which
brought us a seasonable supply as our Vegetables were almost
634 exhausted (though we had plenty of hogs) on coming in here. In the
afternoon a large Canoe came with Feenou, who reported that
648 several Canoes which he was bringing with hogs and other things
from Va'vaoo were lost in the late strong winds. We were now too
well acquainted with his character to give much credit to such a story
but easily overlook'd it from the service he had been of to us before.
[643] The truth probably was that he found himself unable to procure the
things at Va'vaoo which he expected, or if he did get any and heard
at Hapaee which lay in his way back that Poulaho had been with us
he might leave them there, as he doubtless knew the merit of procuring them would have fallen to the share of his superior though he
had been at the trouble. He was however in that case obligd to frame
a story, that it should not appear he had broke his promise to Captn
[643] Cook and to procure him a civil reception at his return. He seem'd to
be sensible of the error he had committed in assuming the character
of the first person in the country, as he not only acknowledg'd

Poulaho to be King of Amsterdam & the other isles but seem'd to 634
insist very much upon it, perhaps from a fear of offending the other 648
when he should hear of his former presumption. 643

The inhabitants have been very busy in cultivating while we were
absent for they have made several large Plantane fields in places that 245
were waste at first. We observ'd here as well as at Kotoo a good many
of the small hillocks where the Yams are planted strew'd with a little 244
white sand, which they say are those intended for the use of the chief. 565
The Melons which the Capt^{n} sow'd here have come up but are mostly 137
eat by small insects & some of the Pine apples left with Toobou seem
to be in a thriving state. 177

SATURDAY 7th. The wind ENE. Fresh breezes with fine clear weather. 241
In the forenoon Poulaho came from Kotoo and we could at once see 132
his superiority to Feenou on meeting him, for the last plac'd himself
down in the circle that sat before Poulaho as an indifferent person. 643
He seem'd at first rather abash'd as some of us were present who had 634
been us'd to see him as a different person, but he soon recover'd
himself & both he and Poulaho went on board with the Captain. He [576]
behav'd there much as any of the others that attended Poulaho, [644]
saluting his foot with his head and hands and could not ther[e] eat [576]
nor drink before him.

A few Canoes came off to the ship but we had less trade on shore 439
than yesterday as most of the people went away when Poulaho
landed. 643

Some of the Indians stole three glasses belonging to the Astronomical Quadrant while M^{r} King was observing on the beach, but 648
they were soon recoverd by applying to Feenou who had been very 634
usefull to us before when things were stole both here and at Ha'paee.

SUNDAY 8th. The wind ENE and NE. Moderate breezes but at night 132
rather gentle. The weather fine. A moderate sea. Between eight and
nine in the morning we weigh'd and left Annamooka steering SBW 114
for the island Amsterdam. The islands to the SE of Annamooka which 133
we had on our left are first Mango'eeke, Mango, Tonoo'maia,
Ko'noogoo and Falla'fa'jeea.[1] There is also a very small one off 103
Kon'oogoo call'd Gefoo'ganna[2] from which runs a large shoal nam'd
Ko'foonga'lillo.[3] In the evening between five and six we saw two
islets or rocks bearing W about four leagues, the N^{o}ermost call'd
Hoonga ha'paee and the other Hoonga'tonga.[4] The first has only five 162

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[1] Kelefesia.

[2] I cannot identify this shoal.

[3] Kefikana, a conspicuous white rock.

[4] Hunga Ha'apai and Hunga Tonga.

perfectly smooth, immediately after which the water deepened and
shoal'd several times but again deepened with a sandy bottom, and at 114
eleven we anchor'd in 7 fathom, the western extreme of Tonga [133]
bearing the east end , Fa'fää SEbS a mile and a half
and Malee'nóå NE above two miles distant. We found the Discovery
on following us also struck and stuck fast for a little time, but could
receive no hurt as the weather was so moderate. The other boats were
hoisted out & a little after noon three of them with two from the
Discovery were sent to sound in shore. Between four & five they made
the signal for having found anchorage, when we weighd and stood
in SSW but anchor'd again before six in 3½ fathom, one extreme of
Tonga bearing the other off shore about two miles.

In the afternoon we had a visit from Poulaho and Feenou, and a
few small Canoes came off & barter'd fruit & fowls, but they had 643
been so well instructed by those from the other isles that they ask'd a 634
very extravagant price for every article. 439

TUESDAY 10th. The wind S and SSW. Gentle breezes with dull cloudy 132
weather and some rain early in the morning. Soon after daylight we
weigh'd and work'd in between the island Ko'lóå and a shoal lying 114
to the westward of Makka'håå call'd Gooa'langa, where we had
from to fathom within which is a smaller shoal that our boats 133
had overlook'd last night. Both these sholes are dry at low water. We
work'd on and about one in the afternoon anchor'd very near Pakåé, 114
or Pang'ia-motoo,[1] a small island within Makkahåå, between it and 133
the shore of Tonga in fathom fine sandy bottom. Within it are 103
three isles nam'd Maneema, Onne'atta and Hóólaiva[2] all joind by a
reef, the last of which is only seperated from the main by a narrow
creek. These form'd a perfect defence to the eastward, and the shoals 114
we had pass'd, which lye to the NW with Tonga to the S and westward, 133
altogether made a harbour entirely sheltered from all winds and sea.
When moord Pangiamotoo bore , a point of Tonga to the
westward , and another which bounds one side of the creek
of Hóó'laiva . Our Consort came to an anchor soon after
between us and the main about a mile from the shore.

The Captain went on shore after dinner to the points opposite 114
Hóó'laiva, and a very little from it found a convenient place for
pitching a tent near a good house with a large open Area before it; 439
but few people were seen though above a hundred Canoes were about

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[1] Pangaimotu.

[2] The first two of these three are Manima and 'Oneata, lying on the same reef as Makaha'a and Pangaimotu. The third must have been then called Uoleva; it is now Nukunuku.

114 the two Ships while working in, with whom we traded for hogs, fowls
439 & vegetables only as the other articles had been prohibited by the
Captain as at Annamooka.

132 WEDNESDAY 11th. The wind SE. Moderate breezes with cloudy
weather. In the forenoon we pitch'd a tent just by the house men-
114 tion'd yesterday, which is almost the only one here as the country
[311] near it is not at all cultivated. The horses cattle & sheep &c were
afterwards sent on shore and a party of marines with their officer to
312 protect the people. We discoverd two or three ponds near the place
but they had all very bad water, though we found one on Pang'ia
motoo that had rather fresher water than any we have met with
amongst the islands, but rather dirty from the little care taken of it
by the natives.

439 A good many Canoes came off & barterd Yams, Cocoa nuts and
a few hogs but they were not near so numerous as yesterday, though
we expected a much brisker trade here than any place we had been
at from its greater extent.

132 THURSDAY 12th. The wind SE. Gentle breezes with very fine weather.
On the evening we arriv'd here the Captain brought on board a
648 person who had attach'd himself to him as a friend when he touch'd
at this island in 1773, and another who had done the same with
643 Captn Furneaux, who commanded the Adventure. Amongst other
[887] things they mention'd a person nam'd Maree'wagee,[1] who they said
was of the first consequence in the place and as they were understood
superior to Poulaho, to whom he was related, but so old that he liv'd
643 in retirement and yet was held in great veneration. It excited his
curiosity so much that he proposd yesterday to Poulaho that he
648 should pay him a visit, which the other readily agreed to and offer'd
to accompany him, at the same time saying he would send previous
notice to Maree'wagee that such a visit was intended him. The
Captain accordingly set out in the pinnace this morning carrying
some things with him as a present, and Captn Clarke joind him in
643 one of his own boats. We went round Makka'háá to the eastward, and
then turning to the SEward according to Poulahos directions row'd
648 up into a spacious bay whose entrance from the east side of Hóólaiva
133 to the opposite point seems to be about two miles, the breadth within
that three and the depth near four, but it was so full of shoals that we
found it difficult to get up with the boats. The east and west sides are
low, with some creeks running into the last farther than we could see
edgd with mangroves, but at the bottom or SE part the land rises to

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[1] Maealiuaki.

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some height. We row'd to the last place and landed amongst a 643
considerable number of people, who receivd us with a sort of acclamation
not unlike our huzzaing, as most of them had probably never 648
seen a Europæan before and apparently had collected for that [133]
purpose. They immediately seperated to let Poulaho pass, who took [609]
us into a small inclosure and shifted the piece of cloth he wore for a [576]
new piece neatly folded that was carried by a young man. An old
woman assisted in dressing him and put a mat over his cloth, as we [292]
supposd to prevent its being dirtied when he sat down, but to our
great surprize on asking where Mareewagee was he said he had gone
from the place just before we arriv'd to the ship. He however desir'd [344]
us to walk with him up to a Ma'laee (a house of public resort or
perhaps worship)[1] which was near half a mile up, but when we came to
a large Area before it he sat down in the path and desird us to walk
to the house, which we did & sat down in front while the crowd that
followd us fill'd up the rest.

After sitting a little while Omaee went to enquire if he meant we
should see Mareewagee, but he either not understanding him or
interpreting his answer into an equivocal one we walkd about a little
and the Captain then ask'd to see his house, which he seem'd averse
to though he promis'd it before; upon which suspecting we should
not be able to see the person we went back to the boat, & just at our
departure three men with leaves strung about their necks sat down
near Poulaho and began to repeat something with a serious air which
we did not stay to hear finish'd. We also met several people coming [431]
with Baskets of Yams & hogs which were sent to the boat after us,
but the Capt^{n} was so chagrin'd at his disappointment that he would
not receive them nor a bale of cloth that was sent after us by a Canoe.

It is difficult to tell whether our disappointment was only accidental
or designed by Poulaho, for on enquiring at our return to the ship
no such person as Mareewagee had been there. I am however inclin'd [123]
to think it arose partly from our not understanding them perfectly,
and that had we waited a sufficient time we might perhaps have seen
the old man, as they mention'd some thing about a chief who would
come presently when they found us determind to go away.

The small tent for making Astronomical observations, with that 114
from the Discovery, were fixd to day immediately on the point at no
great distance from the other tent. A pretty brisk trade for provisions 439
carried on with the natives, a great many of whom came off to the
ship.

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[1] It was not the house that was the *mala'e*, but the cleared space in front of it; and the Tongan *mala'e* was not a place of worship.

[1777]

132 FRIDAY 13th. Calm almost the whole day with dull weather and
rather warm. Some of our people employ'd in wooding, some about
114 the tent in looking after the cattle and other things, others in cleaning
out the watering place at Pang'ia motoo and the sail makers in
439 repairing sails. A considerable number of Canoes came off with
Yams, hogs &c and the Gunner was employ'd bartering for these
articles on shore, to which the large space before the tent was well
adapted.

643 In the afternoon the Captain went to visit Maree'wagee who he
was inform'd had come for that purpose, perhaps from the displeasure
648 shown yesterday at our disappointment. We found a person sitting
under a large tree near the shore a little to the right of the tent, with
a piece of cloth at least forty yards long spread before him, but were
informd that another that sat a little way from him to the right on a
piece of Mat was Maree'wagee. Omai who interpreted, though very
indifferently, inform'd him of the reason of our coming to this island
which he seem'd to approve but said very little, another person on his
right hand repeating most of the things Omai said. The Captain then
made him a present of a hanger, a piece of printed cloth, with some
other triffling things, and Captain Clarke gave him a large necklace
of beads which they esteem very much, both which he receiv'd with
few marks either of displeasure or satisfaction. The other chief who
we understand was Too'bou, a man we had heard of at all the other
places as a person of very great power, was presented with a piece of
Gauze and a few other things which he seem'd to regard but little,
after which we entertain'd them for an hour with two french horns
and a drum, but they were most pleas'd with the firing off a pistol
which Captn Clarke had in his pocket. They presented Captn Cook
with the large piece of cloth, and the visit ended with an invitation to
both the chiefs to come on board the Ships tomorrow which they
readily consented to.

643 Mareewagee is a slender man and from his appearance seems to be
considerably above three score. There was no particular mark of
respect paid him by any person present, nor had he any external
appearance in dress to distinguish him by. The large crowd of people
that were about us might indeed be consider'd as a proof of his consequence,
if he orderd them to attend, but of that we are uncertain;
and yet he is certainly a man very much esteemd as the people all
say he is Mo'tooa Tonga, which is to say Father of Tonga or of his
[164] country.[1] Too'bou seems about fifty, rather corpulent and almost

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[1] Anderson's interpretation is probably correct: *motua* is a word of wide significance—an 'elder', a parent, especially father.

blind with a disorder of his Eyes. It is probable he precedes the other 643
in rank as he certainly posses'd what we might call the seat of honour,
sitting under the tree and fronting us as we walk'd up, while the other [164]
sat aside, and indeed it appeard that he was rather disappointed by
our addressing Mareewagee first & paying most attention to him.

SATURDAY 14th. The wind Southerly. Gentle breezes with fine 132
weather. The people on shore employ'd as before & those on board
mostly in the hold. The natives brought a good deal of fruit and some 114
hogs off & a brisk trade is carried on at the tent. We had a visit from 439
Poulaho who now lives constantly at the house or Ma'laee by the
tent, I believe with an intention to superintend or see that no mischief 643
is done by his people. The Captain made him a present of some things
but neither of the other chiefs came off as they had promis'd yesterday. 648
He entertaind our people at night with a dance at the tent, and [535]
to the surprize of every body the unwieldy Poulaho endeavour'd to
vye with others in that active amusement.

A Canoe went to the Buoy where our boats lay and stole an iron 648
pin belonging to one of them, for which we confin'd one in irons who
was found in the Canoe though not the principal, but the iron being
return'd in the afternoon he was set at liberty.

SUNDAY 15th. The wind SE. Moderate breezes with fine weather. In 132
the forenoon some of us walk'd to the westward of the tent and found
the country totally uncultivated for near two miles, though quite 311
coverd with trees and bushes in a natural state growing with the
greatest vigour. Beyond this is a pretty large plain on which are some
Cocoa trees and a few small plantations that appear to have been
lately made, and seemingly on ground that has never been broke in
before, but it seems to preserve the same appearance still farther on.
We found that several of the principal people, as Maree'wagee, [342]
Too'bou, Fee'nou & some others had erected temporary huts to live [643]
in while they remaind here, near the path which leads through the [634]
uncultivated part immediately west of the tent. Near the creek which
runs to the eastward of the tent the land is quite flat and partly 133
overflown by the sea every tide. When that retires the surface is seen
to be compos'd of coral rock with holes of a yellowish mud scatterd [136]
up and down; and towards the edges where it is a little firmer are
innumerable little holes, from which issue as many small crabs of two
or three different sorts which cover the place as flies on a carcase, but
are so nimble that on ones approaching they disappear in an instant
and baffle even the natives to catch any of them.

At this place is an artificial work which shows these people have 349

were sent to sound for a passage that way to Middleburg. The people 114
employd as usual and the Launch in watering at Pangia-motoo.

TUESDAY 24. Calm in the morning and clear but afterwards light 132
breezes from the southward and then NE with cloudy weather. The two
boats return'd a little after noon and had been as far as the eastermost 114
isles lying off Tonga. They found a narrow passage between Makkahàà [133]
and Mon'ooafai to the eastward of which it is broader and beyond the
isles a clear sea to Middleburg. Few Canoes have been off these two days
and many of the large sailing ones have gone to some other place or
other islands. There has also been little trade carried on with the natives [439]
on shore.

WEDNESDAY 25th. The wind ESE or Ebs. Moderate breezes with cloudy 132
weather. The people employ'd in bringing off yams of which we have a
great quantity on shore, wood &c. The cutter with the Discoverys and 114
the Master were sent to sound a passage to the westward in case we
should not be able to get out by the other but found the place we came
in by the only accessible one and that scarcely so should it happen not
to be very fine weather. Few Indians off at the ship and scarcely any on 439
shore nor do they bring any thing to barter. They have labour'd under
some apprehensions ever since the chiefs were confin'd and are now 648
very anxious about our departure as they see us making no preparations 643
to do it. Poulaho entertains the same notion as the other people and has [634]
had his Canoe riggd to set out for Vavaoo. He mention'd his fears to the
Captain who told him that we had no intention of staying & that if he
would carry him to his house in the country he would order the tent and
things to be carried off at their return which made him alter his resolution of going to Va'vaoo and promise to go to morrow.

In the morning about a pretty smart shock of an Earthquake 133
was said to be felt by several of our people on shore, which did not
last above three or four seconds but a tremulous motion & rumbling
noise continued several seconds after.

THURSDAY 26. The wind ESE. Fresh breezes with cloudy weather in 132
the forenoon but afterwards clearer. In the morning the Captain set
out with Poulaho and we row'd up the bay where we had been 226
before, in which at one place was about twelve Canoes fishing in [648]
company, with Poulahos son & successor in one of them, either for [643]
his amusement or perhaps learning a necessary part of his education. [644]
Their method of fishing was by shooting a seine upon one of the
shoals and surrounding it with their Canoes, on which a man got out
from each and took a net of an oblong shape fastend by each side to a
slender pole of seven or eight feet long, with which every boat was

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THURSDAY 3d. The wind SE. Moderate breezes with dull cloudy 132
weather. In the morning we unmoord and after breakfast weigh'd
and stood round the W end of Pangia-motoo, anchoring on its NW side [114]
in 17 fathom that we might take the advantage of a westerly wind to
pass the narrow[s] between Makkahàà and Mon'ooafai which leads
out to the eastward.

FRIDAY 4th. The wind ESE or SE. Moderate breezes with dull cloudy
weather and some rain. The Indians begin to collect again about the 439
tent as we have had more for these two days than some time past, &
they also bring a few Yams & other things to Barter.

SATURDAY 5th. The wind SE and SSE. Fresh breezes with close gloomy 132
weather and frequent showers of rain.

We had an Eclipse of the sun to day, the earliest beginning of which that could be observ'd happend at hours minutes seconds, but it was totally obscur'd by clouds a great part of the time it lasted especially towards the end. For several days before a great many spots were seen in that body which daily chang'd their number, magnitude & situation, but amongst others there was one place which had a groupe exactly like a cluster of nine islands.

The tent was struck and carried off in the morning and after the Eclipse the Observatory with all the other things and the party of marines went off.

SUNDAY 6th. The wind SbE or SSE. Fresh breezes with dark cloudy weather and some showers of rain.

MONDAY 7th. The wind SSE. Fresh breezes with some strong squalls and dark cloudy moist weather.

TUESDAY 8th. The wind SSE. Fresh breezes with cloudy weather in
the morning but afterwards clearer and more moderate. The 648
Launches of both ships were sent to Mooa with the Cattle & horses
that had been left, and the Captn went to the same place to see a 177
Ceremony which Poulaho told us when we went last to visit him was 231
to happen about this time. We understood then that it was to be an
initiation of his son and heir into some privileges, amongst which was 651
that of eating with his father which he had never yet done, and as it 796
was only ceremonial that he would just eat a single mouthfull of Yam [644]
& his father the same. We found Poulaho in his circle of Kava
drinkers who told us that the ceremony would begin by and by, but
begg'd it as a favour that we would appear with our heads uncoverd
and our hair loose. About eleven oclock we went to the Ma'laee
where we were carried the first time of going to Mooa, but saw very

114 The Discovery intended to bring to a little to the Westward of us
where her boat lay in fifty fathom, but missing the bank she drove off
though they veer'd above a hundred fathom cable, and did not get up
till twelve oclock.

132 FRIDAY 11th. The wind ESE and Ebs. Moderate breezes with dull
close weather. In the morning we hoisted in the boats and in the
114 forenoon got under way, working up between Tonga and the isles
without as yesterday. A reef connects all these isles together except
[133] Eoo'ëeegee (which is the largest and most easterly) and also surrounds
them, but there is no anchoring near it, for in the afternoon
when about two cables length from the reef off Noogoo we had no
ground with less than 62 fathom. In the evening we opened Middleburg,
whose N end is a high bluff point and the rest appeard much as
when the Resolution made it on the East side in 1773, so that it seems
narrow, but we made so little progress today that we did not weather
the NE part of Tonga till ten at night, passing between that &
Eoo'ëeegee.

[439] We had now been a month at Tonga and six weeks more amongst
the other isles, during which time we were not only plentifully
supplied with hogs & vegetables but carried some of the first to sea
and as many Yams as would serve the ships company near two
months, besides having salted of Pork while we staid.
(648) The peacable terms that we liv'd on with the natives while here (if we
except a few triffling quarrels unavoidable in the best govern'd
177 nations) was by no means the smallest part of the satisfaction we
(101) receivd from visiting this cluster of islands, (which Captn Cook from
similar treatment call'd Friendly Isles in 1773 & 1774) and I believe
few people who were unprejudic'd left them without some regret.

101 Amsterdam, Tonga or Tonga'taboo is the most considerable of
these islands and the seat of government, not only all the islands that
we saw being subject to it but several others that will be mentiond
133 afterwards. It is about twenty leagues in circuit, somewhat oblong,
though by much broadest at the east end and its greatest length
from East to west. The South shore which I saw in 1773 is straight
and consists of coral rocks eight or ten feet high terminating perpendicularly,
except in some places where it is interrupted by small sandy
beaches on which at low water a range of low black rocks may be
seen. The W end is not more than five or six miles broad but has a
shore something like the last, whereas the whole north side is invirond
with shoals and islands and the shore within them low and sandy.
The E side or end is most probably like the S, as the shore begins to

assume a rocky appearance towards the NE point though not above 133
seven or eight feet high, and neither of these places have any shelter
for ships, at least the S side which is bold on every part and has a high
surf breaking on it. At the W or rather NW end is an open road,[1] where [481]
Tasman anchor'd in 1643 and Captⁿ Cook in 1773, but besides being
unsheltered the ground is very foul, and Maria bay near the W end [134]
on the N side is far from being a good harbour for large ships from its
shoals & difficult entrance. The place where we lay is exactly in
S Latitude, E Longitude, and forms a
harbour every way safe and convenient with a good landing place,
except just at low water when a sandy flat that runs off a little way
prevents the Boats getting quite close. It is near the middle on the [439]
north side of the island, and though in the neighbourhood of perhaps
the least inhabited part of it, is not less convenient as the natives will [609]
always bring supplies, and there is less danger of being pester'd by
their numbers. A ship coming here ought to make the NE part of the island, and run down between the main and little isles lying off it till she has pass'd the narrow between Makka'ha and Mon'ooafai, which we went out by, and then haul up for the Harbour within Pangiamotoo supposing the wind SEᵗerly which is commonly the case. As the passage we came in by to the Nᵒward is neither safe nor easy the best method is to wait for a breeze from the Wᵗward or Nᵒward, which frequently blows, to repass the strait of Mon'ooafai, or if time will not permit to work through with a flood tide as we did, the length of the whole passage between the isles and main not exceeding four leagues.

It is what may with the greatest propriety be calld a low island, as the trees on the west part when we lay at anchor only appear'd, and the only eminent part which can be seen from a ship is the SE point, though many gently rising and declining grounds are observable
when on shore. The general appearance of the country does not [311]
afford that beautifull kind of Landscape often produc'd from a
variety of hills and valleys, lawns, rivulets and cascades but at the same time it conveys to the spectator an idea of the most exuberant fertility, whether we respect the places improv'd by art or those still in a natural state, both which yield all its vegetable productions
with the greatest vigour and perpetual verdure. At a distance the 137
surface seems entirely cloath'd with trees of various sizes, some of
which are very large, but above the rest the tall Cocoa palms always raise their tufted heads and are far from being the smallest ornament

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[1] Van Diemen's Road.

164 tumour which affects the legs & arms & increases them to an extraordinary size in their whole length: and the other a tumour of the
same sort in the testicles which sometimes exceed the size of the two
fists,[1] but in other respects they may be consider'd as uncommonly
healthy, not a single person having been seen confin'd to the house by
147 sickness of any kind. On the contrary their strength and activity are
every way answerable to their muscular appearance, which they
exert both in their usual employments and diversions in such a
manner that there can be no doubt but they are as yet little debilitated by numerous diseases, the consequences of indolence and an
481 unnatural method of life. The gracefull air and firm step with which
these people walk are not the least obvious proof of their personal
perfections. They consider this as a thing so natural or so necessary to
be acquird that nothing us'd to excite their laughter sooner than
to see us frequently stumbling upon the roots of trees or other
things.

Their countenances express very remarkably the abundant mild-
157 ness & good nature which they posess, and are entirely free from that
savage keenness which marks nations in a barbarous state. They
would indeed rather perswade one to believe that they had been
bred up under the severest restrictions to acquire an aspect so settled,
and such a command of their passions as well as steadiness in conduct, but they are at the same time frank, chearfull and good
humour'd, though sometimes in the presence of their chiefs they put
on a degree of gravity and such a serious air that becomes stiff or
609 aukward & has an appearance of reserve. Their peacable disposition
is sufficiently evinc'd from the friendly reception all strangers have
[439] met with who have visited them. Instead of offering to attack them
openly or clandestinely, as has been the case with most of the
inhabitants of these seas,[2] they have never appear'd in the smallest
degree hostile but on the contrary like the most civiliz'd nations have
courted an intercourse with them by bartering, the only medium
609 which unites all nations in a sort of friendship. In short they seem
157 posess'd of many of the most excellent qualitys that adorn the human
685 mind as Industry, Ingenuity, Perseverance, affability and perhaps

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[1] These two other 'diseases' are one: they are both aspects of the elephantiasis which [752] results from the mosquito-carried filariasis, which is the real disease. The Tongans used surgery to treat the scrotal swelling—Mariner, II, pp. ci–cii; they did nothing about the legs or arms, according to him, but Samwell speaks of 'the Scars of large Gashes . . . seemingly with the Intention of letting out the Contents of the Tumor'.—p. 1045 below.

[2] [721] Mariner's account (II, pp. 71–2) of the contemplated attack on the ships appears to give the lie to this; but he has the later statement, II, p. 138, 'In respect to the intended assassination of Captain Cook, every native of Tonga would have considered it, if it had taken place, a very base act, for which probably the gods would have punished them.'

some other things which have all a cast of superiority in the workmanship. 563 Their language too differs almost totally from that of Tonga, as may be seen in the small specimen I was able to procure 000 subjoind, where Eco, Yes is the only word that agrees, & Latoo, a chief is mentiond by Le maire as signifying the same thing at Cocos Island.

Kanna	To eat
Tabee'ly	A boat
Vai'ty	Coition
Veen'aga	Good (Adopted at Tonga in some cases)
Matanee-denna	The Penis
Laggo'my	Come here
Shainga	No—There is none
Laiva	A woman
Toá	A man
Latoo	A chief
Oeelai	An interjection of admiration
Eeo	Yes.

I must notwithstanding conclude by observing that the natives of 105 Tonga and the isles around it are upon the whole arrivd at as much perfection in their manual works, as much regularity in their government, at as a high a pitch in their agriculture and some other things as any nation whatever under the same circumstances; and that exclusive of the helps obtaind from learning the use of metals and communication with nations who have these advantages, they are in every respect almost as perfectly civiliz'd as it is possible for mankind to be. They seem to have been long at their ultimum: at 177 least by what we may judge from the general description of them given by Tasman they have been so for above these hundred and thirty years, and had they not been visited by Europæans would probably ever have remaind in the same state. What effect our intercourse and the large supply of iron they have now got may have upon them is uncertain, but they seem of that disposition which converts every oppurtunity and example to its advantage and consequently may reap some lasting benefit from our visit. It would indeed appear 439 that they have already by some means learnt the true spirit of traffic, for they would not even part with the twig of a tree to us without asking something in exchange. The articles of ours they chiefly valued was iron ware, as hatchets, nails and knives, with beads of different sorts especially red and blue, the last of which they often prefer'd to iron. They were very fond of any kind of cloth and also of glass looking glasses or earthen ware, but iron was the staple

439 commodity, and amongst the small articles files or rather rasps were held in high estimation. They are undoubtedly of the same origin with
174 the inhabitants of New Zeeland and the isles eastward, for though in some respects they differ in many others they also agree. Their first population happend no doubt in the same manner with the other islands of this vast ocean, and indeed from the great number of these already discover'd we can hardly be at a loss to form a judgment of this manner especially if it be allowd, which is not improbable, that they are much more numerous and at less distances from each other than is generally imagind. Necessity if not choice would soon force the surplus of people which must follow the population of a small isle to emigrate; and I believe a very short time would bring them to some other isle as yet uninhabited. Accident too as well as design has no doubt often had a share in peopling the different parts of the world, & this may be the case in all the places discoverd or visited in this voyage, though it might at first appear the people must be naturally the same. This is far from being the case, but we must attribute it to the different stock from which they sprung before their arrival in the south sea, or we must believe that at the creation every particular island was furnishd with its inhabitants in the same manner as with its peculiar plants and animals.

132 SATURDAY 12. The wind E. Fresh breezes with fine Weather. After weathering the NE part of Tonga last night the wind being rather
114 favourable we stretch'd over for E'ooa and fetch'd it about two in the morning, but kept turning till day light and at seven anchor'd in the same place where Captn Cook had been in 1773, which he calld English road, in fathom water, one extreme of the land bearing the other , one end of Tonga , and the other . The Discovery did not anchor till some time after, when she brought to a little to the Soward and within us. Few Canoes came off
[312] but in one was the Chief nam'd Ta'oofa.[1] The Captn went on shore before and after dinner and found some water which was but very
439 indifferent. They also traded for some Yams and above a dozen of hogs.

As we lay at anchor this island bore a very different aspect from
133 any we had seen and forms a most beutifull landscape. It is higher than any we pass'd since leaving New Zeeland (as Kaò may justly be reckond an immense rock) not excepting Mang'yà and Wateeoo, & from its top which is almost flat declines very gently towards the
137 sea. As the other isles of this cluster are flat the eye can distinguish

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[1] Ta'aufa'a or 'Tioonee'.

nothing but the trees that cover them, but here the land rising gently 133
upwards presents us with an extensive prospect, where groves of trees
are only interspers'd at irregular distances in beautifull disorder and 137
the rest coverd with grass. Near the shore again it is quite cover'd [361]
with various trees amongst which are the habitations of the natives,
and to the right of our station was one of the most extensive groves of
Cocoa palms I ever saw.

SUNDAY 13th. The wind E. Fresh breezes with cloudy Wr & in the 132
evening a little rain. Brought off a Launch load of water. Traded on 114
shore for a good number of Yams and some hogs.

In the afternoon a party of us made an excursion to the highest 439
part of the island, which was a little to the right, and in our way
pass'd a deep valley or rather chasm which is very narrow. About 133
half way up we could see that part of the island under us extended [311]
into a large down which had several risings interspersd with small
clusters of trees, but quite uncultivated, and coverd with grass about
the height of the knee where numberless cattle might be fed. On the [349]
top we found a round heap of coral stones which they call'd E'tchee
as that at Tonga, and seem'd to say it was a mark of Poulahos
sovereignty over the island. At this place was also a spring of excellent [312]
water, and though we found Coral rock at the surface, on crossing the
deep valley which is several hundred feet above the sea we saw here
a soft reddish rock and some sand stone. The top of the island from
this to the north point is an extended flat like that before mentioned,
behind which it rises gradually; but the east side of the island, though
it has a flat like the opposite one, terminates in steep craggs towards
the sea and is at this place in all not above five or six miles broad.
Besides the plants common on the other isles we found on the height 137
a species of Acrosticum,[1] Melastoma[2] and Fern tree[3] with a few other
ferns and plants not common below. Amongst the rest was the Jeejee
in its natural state which grows eight or ten feet high. We return'd by 487
another road which led us through a wooded part of the country and
about third way down met with a little pool of excellent water which 312
kept running into a much larger below, but we could not follow it as
the valley was rugged and the natives say it does not reach the sea
unless when it rains much. We found they burnt the grass in many 311
places but could not discover that it was intended for planting,
although they have a few spots cultivated almost to the top.

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[1] Probably this was the fern Hakato, *Acrostichum aureum*.

[2] *Melastoma denticulatum*, a branched spreading shrub called in Tonga Pesikuku.

[3] The fern tree Longolongo, *Cycas circinalis*, found all over Tonga, and especially common on 'Eua.

684 On returning we were informd that a party of indians had got into the ring where our people traded, struck one of their own people with a club which lay'd bare or as others said fracturd his scull & then broke his Thigh with the same, when our men interposd and sav'd him from being killd. He had no signs of life when carried to a neighbouring house but afterwards recoverd a little, and on asking the reason of so severe a treatment we were informd that he had been discoverd in a situation rather indelicate with a woman who was Taboo'd. We however understood that she was no otherwise Taboo'd than by belonging to another person & rather superior in life to her Amoroso, so that he had not transgress'd in any mysterious point as that word seems sometimes to imply. From this circumstance we had an oppurtunity of observing how they punish infidelity, but the female sinner has by far the slightest share for her misdemeanor as they told us she would only be slightly beat, & indeed the man in such cases perhaps seldom suffers death: as though this person seemd to us to have been very roughly handled they appeard to have no suspicion of his dying from it & said he would be well in a month, so that in all probability if the transgressor in these cases can keep out of the way till the passion of the offended party has subsided, he may escape with a very slight punishment.

132 MONDAY 14th. The wind ENE or NE. Fresh breezes with dark weather
and in the afternoon a constant heavy rain and sultry air. Our
439 people continued to trade on shore for a good quantity of Yams,
Hogs and Fowls & some were employed to cut grass for the Cattle.

114 Some of us went several miles into the valley which runs between
the upper and lower rising of the island to the S°ward. We found the
311 country tolerably cultivated, the soil on the high grounds being
chiefly a red clayey substance but below black and loose, and on
134 examination it appeard that every spot of the grassy part would
admitt of cultivation with the greatest ease & in all likelyhood yield
every thing in the same abundance as those already planted.

132 TUESDAY 15th. The wind N and NNW. Fresh breezes with dull
weather in the morning and then constant heavy rain till near the
evening. A considerable swell set in upon the shore but the ships rode
439 easy. Continued to barter for yams & other things as yesterday.

132 WEDNESDAY 16. The morning calm and the rest of the day variable
breezes or calm. A large swell setting in which broke very violently
193 on the shore, so that it was with great difficulty our boats got off at
night, and it would seem that it is sometimes impossible to get out at

a break in the reef which they enter by here, and is the only place 133
where landing is practicable. Unmoord ship in the morning. A little
to the left of the landing place there is a kind of creek that runs up a
little way into a large cleft chink or gully, the sides of which are
formd by rugged rocks at least forty feet high, which I found upon
examination to be the same as that calcareous substance[a] found on
the highest part of Annamooka; from whence it is probable the Basis
of this Island is of that substance and perhaps the craggs to the eastward,
as this, is a division directly in a solid part of it. There was two [312]
places with excellent water near the upper part which with a little
trouble might be conveyd down so as to water a ship, but it seems
doubtfull if there is such a quantity to be always found in these
places. It was so cool in this place, which is always shelter'd from the 137
sun, that we found several of the sorts of fern growing in New Zeeland
& some others here. We also found on returning by the high grounds
that the rains for two days passd had washd down a kind of iron 134
sand, like that us'd to dry up ink, upon the paths which was every
where sparkling but so mixd with the common mould that no
quantity could be collected.

Our people traded as yesterday and the chief Ta'oofa made the 439
Captain a present of two pretty large piles of yams, which seemd to
be collected by a kind of contribution as at the other isles. He also 431
entertaind us with boxing and wrestling and as an Introduction
several pairs of women box'd with the true spirit of female acrimony, 526
one of the first sending off her antagonist with a bloody nose, but [648]
these matches seldom lasted long before some of their own sex rose
and interposd. Whether the old observation is true that in enmity a
woman is a more implacable adversary than a man, and that our
present example will help to decide it I will not determine, but I am
rather inclind to think their passion for speedy and universal conquest
was the reason of our heroines engaging with such irresistible
fury, as the shame of being conquer'd seemd to affect them more than
the severity of the blows. At the same time we could not observe [157]
without pleasure another instance of the many we had seen before
amongst the men of the great temper and even generosity they
exhibit in sports which are properly their province, and ought never
to engage female delicacy, for two of these after boxing a considerable
time with great spirit and dexterity, and finding neither was likely
to overcome, desisted suddenly and embracing kiss'd each other with

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[a] If this is to be considerd as coral it is very different from that coarse calcareous basis from which all growing corals that spring from it seem to derive their support or rather covering, and is therefore to be reckond a distinct species or has perhaps no affinity to it.

suppose we would never think of applying to on such occasions. It is 609
therefore the best method if a single person or two should wish at any
time to traverse the country to apply to the chief, who will send a 674
guide which will be a perfect security against all insults, for if a 648
larger company chuses to undertake such peregrinations they are
seldom molested. At the same time it should be observ'd that it is
every persons business to avoid giving them an oppurtunity of
offering such insults, as it not only interrupts the good understanding
which ought always to be cultivated with these people, both from a
principle of humanity and as a means of obtaining with ease those
supplys of refreshment which are always wanted by ships that visit
them, but as it also exposes themselves to real danger: For though
we cannot accuse any of the natives, however bad, of an intention to
destroy or even hurt the person thus insulted, yet in the scuffle which
must always happen before they can secure the cloaths which is their
object a man may accidentally receive an irrecoverable blow.

THURSDAY 17th. The wind E. Gentle breezes and sometimes calm 132
with close sultry weather and a good deal of rain. The Capt^{n} went on
shore in the morning carrying the Indian with him whom he 114
releas'd, and in the forenoon we weigh'd and steerd SWBS to get an
offing but afterwards hauld up SSE close to the wind.

Middleburg or as the natives call it E'ooa is only leagues from
Tonga, and English road in Latitude Longitude 131
E. The shore is every where bold, for the reef of reddish
rock, almost like that at Wateeoo, which lines it in some places is 133
scarcely a hundred yards broad. The island is of
figure, about leagues in circuit, and as far as we know
has no anchoring place but in English road. That as being an open 132
road cannot be calld a place of safety, for though it lyes on the [west]
side of the island experience has not yet convincd us that the winds
from that quarter never blow with a strength sufficient to force a
ship from her anchors, and the short time we lay there inform'd us
that even when not blowing directly upon the shore a swell may be
raisd which is both troublesome and may at times cut off all communication
with the shore, as few Canoes came off to us at that time.
Vegetables and hogs may be had in sufficient quantity, but water for 439
the purposes of a ship is just as difficult to procure as at Tonga, and
in other respects though a beutifull spot we found it much less convenient 312
than that place. The anchoring ground too is not of the best
sort as we found the Cable much rubb'd on heaving it up this morning. 133
The people seem not to be in that excellent subordination we 565

55: Anderson D,T-5 (1777) 1967 OU9 Tonga OU9

[1777]

565 saw there, and indeed the few persons of consequence here seem to be little better than factors for the principal men of Tonga who have large posessions in this island, amongst whom we found Latoone Booloo had no small share, and a child of his who was very young
439 had almost as much respect paid it as the father at Tonga. The eagerness of these people to get into their possession some more of our
431 commoditys, which must be reckond inestimable treasures by them, appears from their sending a Canoe which reach'd us in the afternoon with a message importing that the chiefs at Tonga had sent over some hogs as presents and would follow themselves, but it was too late to be of advantage to either party, for we were now three or four leagues
114 off. We sounded at four in the afternoon but had no ground with 120 fathom 3 leagues off.

000 **FRIDAY** 18th. *Lat.* 22.00 S–22.07. *Long.* 185.11 E–185.11–185.11. The wind E except part of the morning when it shifted suddenly to S or SbE. Moderate breezes with close dark weather in the morning and a good deal of rain but afterwards clearer. An irregular sea. In the morning early were taken a-back with a squall when the wind shifted to S, which split the mainsail and maintop gallant sail. We then stood E close hauld but as the wind veerd to E in the forenoon we wore and stood SSE. In the evening it came again to SW when we tack'd and stood to the eastward.

SATURDAY 19th. *Lat.* 22.29 S–22.26.20. *Long.* 186.11 E–00.00–186.00. *Var.* 08.41.50. The wind varying gradually from SW till the evening when it got to SE. Moderate breezes with fine weather. A moderate sea. Stood to the eastward but in the evening tack'd and stood to the Sºward.

SUNDAY 20th. *Lat.* 22.29 S–22.28.15. *Long.* 186.41 E–00.00–186.32. The wind SSE till the evening when it shifted to EbS. Moderate breezes with fine weather. Some swell from the SE. Stood to the eastward till night and then to the Sºward. Saw a fin fish,[1] some tropic Birds, Dolphins and Bonnettos.

MONDAY 21st. *Lat.* 23.03 S–22.59. *Long.* 187.08–00.00–186.39. The wind ENE and sometimes NE. Moderate breezes with fine weather. Some swell from ENE. Stood SE and ESE close hauld. Saw some fish in the afternoon.

TUESDAY 22. *Lat.* DR 23.53 S. *Long.* 187.59–00.00–187.32. The wind NNE and NEbE. Fresh breezes with cloudy weather. A moderate sea. Stood E and Ebs close hauld.

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[1] *Balaenoptera physalus.*

[pp. 967-986 not processed]

56: Samwell D,T-5 (1777) 1967 OU9 Tonga OU9

[1777]

000 covery's People left four Muskets behind them & a petty officer was
sent to fetch them off. The Tide rises and falls about two or three
feet at these Islands. They were Discovered by Capt Cook in his
last Voyage round the World, & called after Lord Palmerston then
one of the Lords of the Admiralty. Omai having lived on shore
during our Stay here was much delighted with these Islands, & used
often to say afterwards that he would come from Otaheite & settle on
them & he made no doubt but he should be able to find them out,
tho' he never was able on being asked to point out which way they
lay by the Sun or the Compass, but for all that he seem'd convinced
himself that he could steer to them in his Canoe & his Ambition
might be flattered with the Thoughts of being King of them. After
all we may rest pretty well assured that Omai will not be so foolish
as ever to make the Attempt.

121 FRIDAY APRIL 18th. We made sail & left these Islands. All thoughts
of getting to Otaheite this spring having some time ago been given up
122 on account of the easterly Winds, & as our Water began to grow
short & the Provender for the Cattle was near exhausted, the
Friendly Isles had been fixed upon as the most likely place where we
shou'd meet with Supplies, and as the Preservation of the Cattle was
a matter of some moment it was well that the Passage to Otaheite
was given up in time; for towards the latter end of the Month when
we made the friendly Isles there was hardly any food left for them in
the Ship, so that if we had been detained at Sea a little while longer
they must have perished of Want; but luckily on the 29th of April we
came in Sight of the Island of Anamooka, called by Tasman who first
439 discovered it Rotterdam. In the Afternoon two Canoes came off to
the Ship with three Men in each. They brought us some Breadfruit,
Cocoa nuts Sugar Cane and shaddocks for which we gave them a few
439 Nails. One of the Indians who was an elderly Man ventured on board
the Ship, his Body was covered over with Scars, his Speech & Action
648 were violent, and he was very earnest in relating something to us
565 which we did not understand, at the same time pointing towards the
Shore, he was much agitated during the short time he staid on board.
This Man we afterwards found to be an Age[1] or Chief. As he was a
very active Person & took a busy Part in managing the commercial
Interests of his Countrymen, & seemed to be of much weight &
consequence in the Island, he was afterwards known among us by
122 the Name of Lord North. While we were standing towards Anamooka
609 we passed several small Islands to windward of us and saw many

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[1] *'eiki.* His name was Kepa.

[pp.987-1011 not processed]

56: Samwell D,T-5 (1777) 1967 OU9 Tonga OU9

sailing Canoes cruising about. We came to an anchor in an open road 122
at the Island of Anamooka, on the outside of the reef facing a bay [609]
with a fine sandy beach at the head of it, where some large Canoes
were hauled up & many of their Houses stood under the Shade of the
Cocoa nut Trees. We had many Canoes come off to us with Hogs, 439
Cocoa nuts & other Fruits which the Island afforded for which we
gave them Hatchets Nails &c. which they highly prized. Capt Cook 122
went on shore in the Bay & fixed upon a House which he hired of the
Indians for our Use during our Stay, which saved us the Trouble of
erecting the Tents. The Astronomers lived on shore tho' they did not
fix their Observatories here. The Horses, Cattle, Sheep &c. were sent [177]
on shore with two Men to look after them; the Natives who had never
before seen any other animal beside a Hog or a Dog were much
surprized when they saw our large Cattle. People were sent on shore
to wood & water; the water they got out of a large stagnant Pond
which was brackish, the wood they cut down was the Mangineel
Tree[1] which gave many of our People sore Eyes occasioned by the
Juice flying into them. The different Parties on shore were under the 439
Command of the second Lieut, & a Market was established before
the House under the Management of the Gunners of each Ship, who
were the sole Persons employed to traffick with the Indians for
Provisions, all other trade being strictly prohibited; a large Ring
was made before the House where those who had any thing for
market exposed them to sale. The Chiefs kept the rabble in order; if [565]
they came too near the House they pelted them with Stones & Cocoa
nuts & those they could reach they banged most unmercifully with [689]
Clubs, we have seen instances of their knocking a fellow in the Head
with one of their Clubs which deprived him of his Senses & he was
carried off by his friends in a State of insensibility, while the Chief
paraded about not minding whether he was alive or dead or seeming
to take any Notice of what he had done. Thus with the assistance of
the Chiefs things were carried on with regularity & the market was
every Day well supplyed with Provisions.

Captn Cook was visited by the King of the Island whose Name is 648
Toobow,[2] about 30 years of age, stout and well made & of a very
agreeable open Countenance. We continued upon friendly terms with 565
him by making him Presents &c. & he encouraged his Subjects to [439]
bring Hogs & other Provisions to market which were our first object,
tho' in a short time another article engaged our Attention from the
highest to the lowest and was sought after with greater avidity than

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[1] Feta'anu, *Excoecarica agallocha.*

[2] Tupou.

439 the Hogs or breadfruit, & tho' it was a contraband Trade it was
[648] prosecuted with the greatest Activity & Spirit in defiance of the
severe Penalties with which it was loaded, & in Contempt of that
[565] Danger which attended the Prosecution of this fraudulent & lucrative
Traffick. This Article was no other than red Feathers. It must be
[171] remembered that at Otaheite red Feathers are prized above anything
whatsoever, they being the most valuable offering they make to their
Gods & very scarce at that Island as they have no birds with red
Plumage, this Circumstance was found out by our Circumnavigators
last Voyage, who happening to bring a few red feathers with them
from the Marqeses found what great Value the Otaheiteans set upon
them, preferring them to every thing they had got. This being
universally known in the two Ships it is no wonder that every one
endeavoured to supply himself with a good Stock at these Islands
where they are so plentiful, tho' these people get them from another
Island. The Indians in a short time perceving our eagerness after
them raised the Price of them, so that at last they became so dear
that it was hardly worth our while to purchase them, as the Hatchets
& Shirts we gave them would fetch as much at Otaheite as the small
Quantity of Feathers they gave us for them. However every one
provided himself with a good Stock before we left these Islands &
[292] they turned out to very good Account at Otaheite. The Inhabitants
[301] make Caps of them & various Ornaments for their Dresses, those
they sold us were pasted on Cloth, & had a very beautiful appearance.

Some of us used to go every day shooting wild Ducks, a great
122 number of which were met with on a large Lagoon & some Ponds in
609 the interior Part of the Island, the Indians would generally attend us
& look out for them & when they were shot run into the Pond &
241 fetch them out. Along the large lagoon which occupies a great part
of the middle of ye Island are most delightful walks shaded from the
361 Sun by the branches that meet together over head; the Country
262 throughout is exceedingly well cultivated & has the appearance of a
beautiful Garden; nothing can be more agreeable than the Inclosures
in which their Houses stand, round which the bread fruit & Plantain
Trees grow & extend their friendly Shade over the Natives, while
they sit beneath them partaking of a delicious & wholesome Meal
supplyed by those trees that spread their umbrageous Leaves to
133 defend them from the Rays of too near a Sun. Such enchanting
Prospects does this little Isle afford that it may be said to realize the
poetical Descriptions of the Elysian Fields in ancient Writers, it is
certainly as beautiful a Spot as Immagination can paint; there are
small Hills here & there to vary the prospect, tho' they rise to no

Lives & Property: of the latter it may be doubted whether they have 565
any! We were every day well supplyed with Hogs, Breadfruit &c, and
as red Feathers were become a valuable article of Trade, on May 23rd 439
Phenow with several large Canoes set sail for some Islands called
Vowvow[1] which they told us lay to the Northward at the distance of a
Day's Sail, to get a Supply of Feathers.

MONDAY MAY 26th. We got under sail & stood along shore to the 122
Southward keeping a boat a head sounding, at six in the Evening
came to an anchor off the Southernmost of the Happai Isles. During
our stay here Powlohow, who was said to be the Chief of all the 648
Islands, arrived from Tongataboo, Captn Cook made him many 643
large Presents & treated him with great respect. On leaving these
Islands we directed our Course for the Island Anamooka & were 122
accompanied by Powlohow. We had some Gales of Wind & found [643]
it a difficult passage between the small Islands in our way, one night
the Resolution was very near being lost on the breakers that run off [648]
a small sandy Island called Agano,[2] however in the afternoon of June
5th we came to an anchor in our old Birth off Annamooka in Lat
20° 14' South. The Names of the small Islands we came by in our [103]
passage hither are *Matafoa*[3] where there is a Volcano, *Kodoa, Agaho,*
Modua & *Fedoa.*[4] We continued here till the 8th during which time we [439]
were supplied with Hogs and Roots by the Natives, & some of the
Gentlemen of both Ships went ashore ashooting where they met with
good Sport on the Lagoon which is frequented by great Numbers of
wild Ducks. Phenow returned from Vowvow with some red feathers, [164]
he told us that several of his Canoes had been lost in a Gale of Wind
& that all the Men had lost their lives. [634]

SUNDAY MORNING JUNE 8. We weighed Anchor and came to sail
with the Wind at NE; after clearing the Island of Annamoka we stood
sbw for the Island Tongataboo, called Amsterdam by Tasman who
first discovered it. Two Indians took a passage with us in the Ship [648]
and Powlohow, Phenow and other Chiefs accompanyed us in their [643]
large Canoes. Next day we saw the Island. [634]

JUNE 10th. Both Ships moored in a fine safe Harbour in 10 fm water with fine black sand, Lat. 21° 7' South; on coming in both Ships struck lightly on a patch of Choral Rock but received no Damage.

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[1] Vava'u.

[2] Samwell has got his names confused. 'Agano' here seems to be written over an erased name with a vestigial 'h' in it—possibly 'Agaho' of three lines below, which must be Kao. But the small sandy island was Putuputua.

[3] Tofua.

[4] Kotu, Kao, Motu Tapu and Fotuha'a—a rather random selection.

● 439 We were soon surrounded by a great number of Canoes full of men who behaved in a friendly manner to us and sold us Hogs, Cocoa nuts, Plantains and other fruits for nails & beads.

122 JUNE 11th. The Tents with the 2 Astronomers' Observatories were
erected on shore under a Guard of Marines, & all our live Stock was
landed which consisted of 4 Horses, several head of Cattle, Sheep,
Goats & Hogs with Peacocks, Turkies & Geese. Our Tents were
situated at the upper end of a fine Area surrounded by Trees, it seems
to be a place appropriated for the Exhibition of Public Games, such
as wrestling, boxing &c. Close to the Tents was one of the Chiefs
Houses, behind them lay a thick wood, on the right an Inlet which
extended a considerable way up but was dry at low water, on the left
was the Harbour where we could see between the Trees the Ships at
anchor; the Observatories were erected without the Area close to the
Beach but within sight of the Tents, they were inclosed with a Hedge
[312] & always guarded by a Sentry. Near the Tents was a pool of indifferent
fresh Water, of which there are many in the Island and are
[515] used as bathing places by the Natives. Powlohow took up his residence
177 in a House a little way without the Area, that next to the Tents
was occupied by his Consent by some of the Gentlemen who were
825 ordered a shore on duty, and another little Hut close by was allotted
[122] us for the use of our Cattle & Poultry, whose appearance excited as
[643] much astonishment and admiration as a Collection of wild Beasts at a
Country fair in England. The Indians were a long time before they
could be persuaded to approach near to the Horses & Cattle, but our
Sheep & Goats, being more like their Hogs, they did not regard with
the same degree of Terror tho' it was some time before they became
thoroughly reconciled to the Goats; these on being approached by
the Indians would rear on their hind Legs & make a push at them,
which put them in bodily fear & often made whole armies fly.
However they found out by degrees that they were as innocent as the
Sheep & only more playful, so that at last the Indians passed by them
648 or advanced up to them without any dread. During the time of
erecting our Tents we were surrounded by a great Number of
609 Indians who behaved in an orderly and peaceable Manner and at
643 night retired to their several Homes except the attendants of Powlohow,
who remained with him at his House waiting for his Supper.
[431] Some Servants arrived with provisions enough for a Hundred men
which Powlohow, after a basket or two were laid by for himself,
ordered to be laid at the Doors of our Tents as a present for our
people together with a number of Cocoa nuts; the provision he

177 of our people who informed them that he had been attacked by
two Indians who had knocked him down & stripped him of his
648 Cloaths; he had been rambling in search of a mistress when some
difference arose between the contracting parties which ended in the
above manner, he was severely reprimanded & strict orders were
given by the Officers ashore to prevent such quarrels for the future.

439 JUNE 12th. Early this morning the Tents were surrounded by a great
number of the natives who brought provisions & various other
articles of Traffic: for the Conveniency of Trade a regular market
was established & the Gunner from each Ship was appointed to
manage it & buy Provisions. The Indians were directed to sit down
round the Area & not to pass a certain boundary along which a
Sentry was ordered to walk; the Indians complyed with these
Regulations & Trade was carried on between us with perfect Harmony,
and we were plentifully supplied with Hogs, Yams, Bread
fruit, Cocoa nuts & Plantains which we bought at a reasonable price,
our Hatchets and Nails being in great esteem among them. At the
same time that the Market ashore was well stocked the Ships received
no inconsiderable supply from the Canoes, so that having more
Hogs than were expended by the daily Consumption of the Ships we
648 salted much Pork for sea Store at this Island. One of our people paid
a visit early to the King whom he found drinking Ava attended by
643 many of his Chiefs. The man wishing to shew his respect to his
majesty & concluding that our Method of saluting would not be
understood by him endeavourd to pay Homage to him after the
manner of the Country, but being very aukward in performing the
Ceremony his Majesty & all his Courtiers burst into Laughter; poor
Powlohow himself was so delighted that he laughed himself into a fit
of the Pthisic[1] & was for some time unable to speak, however at last
he recovered himself & made the Man sit down by him, & was
seemingly pleased with this blundering Testimony of his respect.

439 JUNE 13th. The Long Boat was employed in watering and the Sailmakers
sent on shore to repair the Sails, while the Inhabitants are
fully employed in bringing Hogs & Yams to the Ship & to the Market
at the Tents, for which we give them nails and Hatchets.

526 WEDNESDAY JUNE 18th. Our marines were excercised on shore, &
648 in the Evening fire works were play'd off to the great astonishment of
the Indians, who in the Afternoon entertained us with their Exercise
541 of boxing & wrestling, which are conducted in the following Manner
177 within the Area before our Tents amidst a prodigious Concourse of

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[1] i.e. phthisic, used loosely for a bad fit of coughing.

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& made a blow at him, but missed him; he endeavoured to lay hold 648
of me again, but well knowing that putting a good face on the Matter 685
would be the only way to extricate myself out of their Hands, I
followed my blow & after making an Effort or two to lay hold of me
he took to his Heels finding himself deserted by his Confederates, who
had run away in the utmost precipitation on my first getting loose, I
thus saved above one half of the Beads & probably my Cloaths which
it is odds but they intended to take from me. This was the only
instance of Violence that I met with among them, tho' I was
frequently as much in their Power as I was at this time.

There were but few Houses on that part of the Island where the 361
Ships lay, & those who came from distant Parts erected temporary
Huts near our Tents for their residence during our stay in the
Country. Among these was Malawagee the father of Phenow, an old 643
Man & a Chief of the first consequence, and there was another Chief
who generally resided in the House close to the Tent, who was remarkable 644
for being foolish & possessing the highest Rank tho' it is
believed not the greatest power of any of the Chiefs of these Islands.
His name was Tooloobooloo,[1] he had a wife as foolish as himself and
they both seemed to be considered in the light of Divinities among
their Countrymen; Powlohow who was certainly their King, as he
possessed the first Authority among them, was not even suffered to
eat in the presence of this foolish Fellow. Omai spent most part of his 123
time on shore, where he erected a small House for himself and his
Girl close to the Astronomer's observatories; as he always kept
Company with Captⁿ Cook & the officers of the Ships, he was looked
upon as a Chief of great Consequence & as such was highly respected
among them. The two new Zealand Boys did not trouble the Ship [177]
much while we staid here, they spent most of their time among the
Natives, who paid much attention to them & were very fond of their
Company; having once seen the new Zealand Heivah or war dance
they frequently desired the Boys to perform it before them which they
did & were much caressed & admired for it. In this manner those 648
who had leasure time on their Hands spent it here, while the necessary 439
duty of the ship was carried on such as wooding, watering,
repairing the Sails, salting Pork & stowing away yams for a Sea 123
Stock, & Captⁿ Cook kept up an amicable intercourse with the 122
Chiefs by making them Presents & treating them at all times with 784
Kindness & respect, by which means our market ashore & the Ships
were well supplied with provisions but which cannot be the case
without the Concurrence of the Chiefs, who have it in their Power to

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[1] Latunipulu.

648 put an interdiction upon all Trade, which they call Taboo, which is
always most religiously observed by all the Natives; from hence it
439 appears how necessary it is to cultivate the good will & Friendship
123 of the Chiefs, which Captn Cook never failed to do, and of his
extraordinary good management of Indians nothing can be a
122 stronger proof than the ample Supplies we procured at all the Islands
784 we touched at. When Powlohow first visited Captn Cook at the
Happai Islands, among other things he asked him what he wanted at
648 these Isles, which rather surprized him as we had never such a
643 question proposed to us before at any of the South Sea Islands, the
natives contenting themselves with staring at us with vacant astonish-
439 ment & getting what they could from us without enquiring what
brought us amongst them or what we wanted. This gave us no mean
opinion of his Understanding; being answered that we touched here
for refreshments he told us we should have whatever the Country
afforded. The old King after a little further Acquaintance with us,
observing that we paid the best price for Women & Hogs, concluded
that these were the Commodities we were in search of & that wher-
ever they abounded we should be glad to go, & being very desirous
that we should visit Tongataboo, the largest of his Islands, He urged
Captn Cook strongly to go there, always enforcing his Intreaties with
that irresistible Argument, wurrow wurrow Booaga, wurro wurrow
Phaphenee,[1] that is, that in that Island we should be supplied with
plenty of fine Hogs & fine women.

122 Omai having a dispute one day with the Corporal of Marines,
struck him while upon duty, on which the Man returned the blow,
at this Omai was highly offended & made his Complaint to Captn
Cook, but not receiving that redress which he expected he took the
Resolution of staying behind at these Islands & with that Intention
set off for a distant part of the Country & took Tayweherooa the
New Zealand Boy along with him; a messenger was sent after him &
he was prevailed upon to return the next day & matters were made
up to his satisfaction, tho' Captn Cook would not punish the Corporal
648 as Omai had struck him while upon duty. The Island being exceeding
609 beautiful & pleasant & the weather almost constantly fair, hardly a
day passed but some small party of the Gent. of both Ships made
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[1] Samwell's Tongan here is a little doubtful. The word *lau* would mean 'plenty of', in the sense of an indefinite number, and would give him his '-row'; but possibly the 'old King's' irresistible argument was not based on numbers but on quality, and he was saying *ualoa*, in the sense of upstanding or large. (Tongan informants think this likely, though the word would now be applied to a tall thin person, and not to animals.) In Tongan eyes, quantity in both women and pigs would be synonymous with quality: therefore *ualoa puaka, ualoa fefine*.

Among their Amusements has been omitted the following which 524
the Children use, the first is keeping four balls up for a long time like
some of the slight of hand gentry do in England. The other is darting
a Stick with an oval head a great way which they do by striking it 526
first against the ground, it then rebounds to a considerable distance,
this is a play very common among the young boys.

During our Stay among them they did not seem to have any quarrels 721
on their Hands either foreign or domestic, however they informed
us that a little time before our Arrival they had been at War
with the People of an Island called Fidgee which they said lay to the
WNW at the distance of five day's Sail which may be ab^{t} 200 Leagues.
By their Account this Island of Fidgee is much larger than Tongataboo, 829
& the People numerous & as they say Cannibals. However at this
[time] there were some of the Natives of that Island at Tongataboo, & 439
it is probable that the two Isles carry on a Trade in time of peace. We
saw some pieces of Cloth very curious & prettily painted which they [563]
told us came from Fidgee & that none like it was made at Tongataboo.

It is probable that the white people above described are the same 114
with those mentioned in the Spanish Voyages published by Dalrymple
& which he supposes were the Inhabitants of the Southern Continent [143]
which the Spaniards were in search of. The nonexistence of
which was proved so incontestibly by Capt^{n} Cook in his last Voyage
that it must put a stop to any further Cavils & idle suppositions from
the Editor of those Voyages.

Superiority of Birth seems to be held in high Estimation at these 565
Islands, The natives priding themselves much on being related to the
Chiefs whom they immagine to be the greatest Potentates upon
Earth, or indeed in the Skies; for in speaking of those of the highest
Rank they always told us that they were 'Agee la langee agee lalo
fonooa',[1] which signifies Kings of the Skies above & of the Earth
below, at the same time pointing with their Fingers to the Sky & the
Earth. And as the Chiefs were held in great Veneration by all Ranks, 648
Capt^{n} Cook always treated them with due Respect & was careful 565
that no Insult was offered to them by any of our people. Fatafee the
Brother of Powlohow[2] being on board the Resolution one day & 648
seeing a Girl whom it seems he knew with one of the Sailors between
Decks, wanted to take her away from him, but the Man having 644
engaged her for the Night & delivered the Payment to her friends, 123
refused to part with her and the Chief insisting upon it & going to

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[1] *'Eiki he langi 'eiki lalo fonua*. The translation Samwell gives is correct, if one accepts 'kings'.

[2] Fatafehi was the family name: this was a half-brother, Ma'ulupekotofa.

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[1777]

122 Sunset came to an anchor. We are bound for the Island of Middle-
burgh called by the Natives Oo-hā.[1]

FRIDAY JULY 11th. Weighed & sailed, turning to windward all the Afternoon, got throug[h] the Passage, & by midnight having weathered the Easternmost Part of Tongataboo, we stood to the SSW for Oo-hā.

SATURDAY JULY 12th. This forenoon we came to an anchor be-
tween the N & W Points of the Island Oohā or Middleburgh about
2 or 3 miles distant from the Shore. Many Canoes came round the
609 Ships. Captn Cook went ashore & a Market was opened for Provisions
648 on a Platt of Ground near the landing Place, the King of the Island
attended Captn Cook on board who sent him ashore with many
439 presents, & among the rest he gave him a Ram & a Yew, which he
634 set a greater Value upon than Malawagee had. Pheenow had pro-
posed to accompany us hither, but was prevented by the Death of
764 some old Woman of distinction whose funeral he was obliged to
302 attend, & on whose account he had the Hair of his Head cut off
according to the Custom among these Islands.

439 SUNDAY JULY 13th. Our Boats ashore trading for Provisions & some
609 Canoes about the Ships.

TUESDAY JULY 15th. Captain Cook, Omai & some other Gentlemen
439 went ashore & others to trade for Provisions. In the Place where the
Market was held an Indian was killed by some of his Countrymen; it
684 seems that his Crime was endeavouring to force one of the Agee
Girls, when it was so highly resented by her Friends that accidentally
seeing him among the Croud they fell upon him with Clubs & put
him to death; the Man threw himself for Protection among our
648 People but they could not save him. In the afternoon two of the
Resolutions people, walking in the Country, were stripped & beat
685 by the Indians, they came naked to our People at the Market place
who gave them something to throw over them. Captn Cook being
ashore sent for a reinforcement of marines, which arriving soon after
had such an Effect upon the Agee or Chiefs that not only the Clothes
were returned but one of the Thieves was deliverd up, & he was
carryed Prisoner on board the Resolution where the poor fellow
expected to be put to Death. However he was ransomed next day
for a large Hog.

142 Considering the small Distance between this Island and Tonga-
taboo the difference between the Natives is remarkable, these being

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[1] 'Eua.

some few with as fine brown hair, as ever I met with. The people of distinction
in general wear their Hair rather long, those of inferior rank quite 175
short; some of the Women of Fashion let it grow & hang in ringlets below 302
their Waist. These people cut their Hair & shave with Sharks Teeth, [237]
which answer those purposes amazingly well. They are exceedingly neat
& cleanly in their Persons, both Men & Women bathe as soon as they rise [515]
in the Morning, and are then rub'd over with Oil which has a most agreeable
perfume; this perfume has a pleasing effect if at any time you get
umbled among a multitude of them, which was frequently the Case.

Their police[1] I never cou'd clearly understand; now tho' Powlahow is 175
King here to all intents & purposes, still there's a family consisting of a
Mother, 2 Daughters & a Son, who, tho' of no consequence in the State, 644
Powlahow cannot eat or drink before, & in many Cases does them Homage; [643]
the Mother was Powlahow's Fathers Sister, of course his Aunt, & these
Daughters & Son his Cousins.[2] We had the Son & one of the Daughters
frequently with us; they are not even Principals of any districts, nor seemingly
have any thing at all to do with government, but live a strange
lawless Life, going where they please & doing what they please. It is not 175
unusual here, if any Gentleman sees a Servant carrying Plantains, Yams
or whatever may be, to call him & demand whose property that is, & upon 422
being made acquainted, if he happens to be a Man of less consequence 565
than himself, he will without any hesitation take any part he pleases, or
probably the whole, & send the poor Fellow away about his Business.
This Cousin of Powlahow's, whose Name is Latūla-boolu,[3] one day was by 175
our Tent & saw 2 fellows passing, loaded with ripe Plantains, he call'd
to them & demanded where they were going, they answerd, to Powlahow, 422
upon which he order'd them to bring the Plantains to him, this they not
very readily obeying, he sent two of his retinue who beat them confoundedly 644
& made the poor fellows bring the Plantains & beg to be excused
farther Punishment; these he wanted to sell but cou'd not find a
purchaser, he then eat as many as he cou'd, gave to some Gentlemen there
as many as they wou'd have & very civilly order'd Powlahows Men to
take the rest to his Master. As to the lower Class of People they certainly 175
can have no redress for the grievances inflicted by the Agee's, be they
whatever they may; this I conclude from Transactions which happen'd 565
immediately before us, for I think it is a very fair inference, if they may
knock their Brains out at their Pleasure, they may certainly do any thing
else they shou'd chance to take in their Heads. One day while we were 175
laying at Anamooka, an Agee orderd the People to retire from our Market
Place, where we were trading for Hogs, Yams &c; they directly moved off, 689
but not being so quick in their Motions as the Agee thought they shou'd, 439
he took up a confounded large Stick, and beat without mercy who ever he 565

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[1] Principles of 'public administration'.

[2] Clerke seems to be speaking of the *Tu'i Tonga fefine* Sinaitakala, the female Tu'i Tonga, and her children the *Tamaha*; the eldest daughter was Maoungalakepa, the son was Latunipulu. Cf. Cook, p. 136, n. 2 above.

[3] Latunipulu.

175 cou'd come near; to one poor Fellow he gave such a blow, that he fell
down speechless, had a violent discharge of Blood from his Mouth & Ears
689 & was in very strong Convulsions; I concluded he was murder'd & was a
565 good deal aggravated & surpriz'd at the perfect Ease of the Agee upon the
[439] Occasion, who was no more affected, than if it was a Cock sprawling out
before him; the poor Fellow was taken away in this Condition by some of
his Friends & I believe soon recover'd, for if I'm not much mistaken I saw
175 him, apparently pretty well a few days afterwards. Another instance of the
kind happen'd at Middleburgh;[1] A Man amusing himself looking on at our
684 Market, seemingly as chearfull & free from Apprehension as any Man in
565 the World, when all on a sudden, to the great Surprize of our people, 4 or
5 of the Indians arm'd with Clubs, rush'd thro' the Croud, fell upon him &
beat him to Mummy, they sever'd his Skull, mash'd one of his Thighs & wou'd not have left a whole bone in his Skin, but our People recovering from their Consternation & being much hurt at such an appearance of Cruelty, made them desist; the Man was taken away with some Signs of Life in him, which however we found soon left him, for he was beat to peices. Upon enquiring the reason of this terrible business, they told us the Man had been particularly favour'd by an Agee's Wife; that the People who beat him, was the Agee himself & his Servants, who had come in quest of him purposely to knock him on the Head; I ask'd if they wou'd serve the Lady so too, they answerd no, possibly they might chastise her a little, tho' not severely: but what is very extraordinary on these Occasions, the Standers by look on with the utmost indifference, just as tho' they were Matters of course and in 5 Minutes afterwards are as facetious as if nothing of the kind had happen'd.

175 We clearly perceive that Powlahow, Feenow, Mallawogga and any of
699 these principal People, can & will order a Man to be put to Death
565 instantaneously, & there is not the least Appeal from their Commands.

These good fellows, with all their Benevolence, Hospitality & social
175 Qualities have one ingredient in their Composition, which is at least a very
inconvenient one to their Neighbours, this is a devilish propensity to
685 theiving: they always went in & out of the Ship just as they pleas'd & in
123 the course of the Day, there were seldom so few as 100 of them on board;
they soon began this slight of hand work upon every thing that they cou'd catch hold of; what hurt me most was, before I cou'd be at all aware of them, they stole all my Cats, which were very good ones, & as they did not take the Rats with them, of which the Ship was full, I felt this proof of their Dexterity very severely. I frequently detected them in Thefts, then threatned hard & turnd them out of the Vessell, however this had no effect; I applied to Feenow, who told me to kill them, or he wou'd kill them if I pleased; this I by no means approved of, however some Method must be taken or they wou'd strip the Ship, therefore the next Culprit that came in my Way, I tyed up & gave a good flogging; all the rest acquiesc'd

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[1] 'Eua.

in the justice of this procedure, look'd on with seeming pleasure, and when 175
I turn'd the fellow overboard, tho' there were at least 20 Canoes about, no
one for a quarter of an hour wou'd take him up: I adher'd to this Plan, 685
which tho' it did not abolish this confounded custom, it render'd it much 123
less frequent. The Indians themselves so far saw the justice of it, that we
had several instances of their detecting a Thief which had eluded the
vigilance of our People, & bringing him to me with his stolen Goods; upon
these Occasions I always liberally rewarded the Prosecutor & rewarded
the Thief. I offerd abundance of fine Things if they wou'd return my Cats,
but they were too fond of them, I found them irretrievable. Our general 175
Trade at these Isles were Hatchets Nails, Knives, Looking-glasses, Beads,
& sometimes a peice of red Cloth; the Blue & red Beads were what they 439
most esteem'd, any other Colour they put very little Value upon. 123

Our Method was, whenever we went to an Island, one of the first things [822]
we did, was to look out for a convenient market Place; here we stationed
our People who were adjudg'd to that duty, which were generally the
Gunners of the 2 Ships, & here the Natives very regularly brought their
Merchandize; sometimes they wou'd bring them to the Ships, where there
were likewise people appointed to bargain with them. The Agee's frequently
made us large presents of Yams, Hogs &c; this was pleasing, as it
kept up that social appearance, which it was both our Inclination &
Interest to maintain; but they were always in the End, by far the dearest
Provision we got. Every place we went to was deficient in that important [312]
requisite, good Water, we got some at them all, but cou'd not denominate
it good: at Anamooka it was rather brackish, at the Arpi Isles rather filthy,
and at Amsterdam it was both; however it was all I believe very wholesome,
for we found no bad effects from the use of any of it, we had no
other, & our People were all very healthy, but it was not so palatable as we
cou'd wish.

They tell us, that at Vow-Vow (which they say is a large Isle, laying N° 175
of the Arpi Isles one days sail) there is a very good Harbour with a fine
Stream of Water running into it;[1] they tell us too, that there's abundance of 823
excellent Water at a Group of Isles, which they call Fidgi, which they say
lie WNW 5 Days sail with a fair Wind from those they call the Arpi Isles
where we were: five days sail for one of those Canoes is a great distance,
they sail very fast; from all the Accounts I cou'd get, I shou'd conclude the
distance about 200 Leagues. These Fidgi Men are the Masters of this part 175
of the World; these People, own they beat and do as they please with them;
they are very lavish in the praises of the Country; they say it abounds in 829
every good thing, that the Women are very handsome, and the Men very
good, if Friends, but if Enemies they are very devils; in short these our good
Friends here, are in perfect dread of them, but they are now upon very
good Terms. A Canoe came from Fidgi whilst we staid here; one peculiarity 000
I observ'd in the Men, they had all the Grissle of the Ear cut out, so

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[1] The reference may be to Neiafu, a deep and land-locked harbour.

[424 cont.]

000 burnt as it were at the tips. He had three circular spots on each
175 304 arm, about the size of a crown piece, consisting of several concentric
[171] circles of elevated points, which answered to the punctures of the
Taheitians, but were not blacked; besides these, he had other black
[301] punctures on his body. A small cylinder was fixed through two holes
in the lap of his ear, and his left hand wanted the little finger.
175 He continued his silence for a considerable while, but some others,
609 201 who ventured on board soon after him, were of a more communicative
124 turn, and after having performed the ceremony of touching noses,
175 spoke a language which was unintelligible to us at that time. In
the mean while we arrived at the N.W. point of the island, where we
struck soundings on a good bottom, in an open road, and let go our
175 anchors about nine in the morning. We were presently surrounded by
439 a number of canoes, each containing three or four [425] people,
175 who offered great quantities of their cloth for sale. The canoes
501 were small, about fifteen feet long, very sharp built, and decked
[171] or covered at each extremity. Most of them had out-riggers made of
poles, like the small canoes at Taheitee, but the workmanship of
these boats was infinitely preferable, as they were joined together
with an exactness which surprised us, and the whole surface had
[171] received an excellent polish. Their paddles had short broad blades,
something like those of Taheitee, but more neatly wrought, and of
175 better wood. They made a great deal of noise about us, every one
439 shewing what he had to sell, and calling to some one of us, who
175 happened to look towards them. Their language was not unpleasing,
[609] and whatever they said, was in a singing kind of tone. Many were
[565] bold enough to come on board, without expressing the least
[431]
[201]

[425 cont.]

175
609 hesitation, and one of these seemed to be a chief, or a man of some
565 [431] quality, and was accordingly treated with a number of presents,
[201] which he severally laid on his head, when he received them, saying
fagafetai every time. Our English cloth and linen he admired most,
and iron wares in the next degree. His behaviour was very free and
unconcerned; for he went down into the cabin, and whereever[A] we
175 thought fit to conduct him. He likewise told us, upon our enquiry,
101 that the island near which we lay at anchor, (the same which
124 Tasman called Middleburg) was called Ea-Oowhe among his country-men;
and that the [426] other to the north (or Tasman's Amsterdam island)
bore the name of Tonga-Tabboo. We consulted several of the natives,
in order to have greater certainty on this point, and always
received the same names in answer.

175 After breakfast, the captains went on shore with us and the
123 chief, who had continued on board all that time. A bed of coral
175
123 rocks surrounded the coast, towards the landing-place; but many
609 canoes occupied the deep channels between these rocks, and a great
[133] number of inhabitants in them as well as on the shore, shouted for
[439] joy at our approach. The canoes immediately came along side the boat,
[431] and the natives threw great bales of cloth into it, without asking
for any thing in return; while many of both sexes swam about perfectly
naked, holding up some trifles, such as rings of tortoise-shell,
fish-hooks of mother of pearl, and the like, for sale. As soon as
we could make way through the throng of canoes, we approached as
near as possible to the shore, and were carried to it out of our boat,
175 for which the natives very readily offered their backs. The people
609 thronged about us with every expression of friendship, and offered
431

[A] [Sic--Analyst.]

[435 cont.]

175 hands; the differences of sex or age did not exempt them from this
304 amputation; for even amongst the few children, whom we saw running about
[291] naked, the greater part had already suffered this loss. Only a few
grown people, who had preserved both their little fingers, were an ex-
175 ception to the general rule. We immediately conjectured that the death
304 of a near relation or friend might require these strange mutilations,
171 in the same manner as is customary among the Hottentots, in Africa (10);

> 10. See Kolben's account of the Cape of Good Hope; also the Recherches Philosophiques sur les Americains, par M. Pauw, vol. II. p. 224, 229.

the Guaranos, in Paraguay; and the Californians; and our enquiries,
though unsuccessful at first, afterwards confirmed the conjecture.
175 Another singularity, which we observed to be very general among these
304 people, was a round spot on each cheek-bone, which appeared to have been
burnt or blistered. Some had it quite recent, in others it was covered
with a scurf, and many had a very slight mark of its former existence.
[171] We could never learn how and for what purpose it was made; but we sup-
posed it could only be [436] used like the Japanese moxa, as a remedy
against various complaints.

175 Notwithstanding the engaging manners of the natives, we foresaw
122 that we should make but a very short stay among them, because our
439 captains could not obtain refreshments in any considerable quantity;
which might be owing not so much to their scarcity upon the island, as
to the difficulty of making our goods current for such valuable articles,
175 when they could obtain them in exchange for arms and utensils. They
439 had brought indeed a few yams, bananas, coco-nuts, and shaddocks for
[227] sale, but they soon dropt that branch of trade. Our people purchased
[237] [171] an incredible number of fish hooks made of mother of pearl, barbed with

[436 cont.]

175 tortoise-shell, but in shape exactly resembling the Taheitee fish-
439
237 hooks, called witte-witte (11); some of which were near seven inches
175 long. They likewise bought their shells, which hung on the breast,
439 their necklaces, bracelets of mother of pearl, and cylindrical sticks
301
[237] for the ear. They had the neatest ornamental combs that can be
[824] imagined, consisting of a number of little flat sticks about five inches
[531] long, of a yellow wood like box, most firmly and elegantly connected
together at the bottom by a tissue of the fibres of coco-nut, some
of which were of their natural colour, and others dyed black.
175 These fibres were likewise employed [437] in making a great variety
285 of baskets, wrought with regular compartments of two colours, brown
531
and black, or sometimes all brown, and ornamented with rows of
round flat beads, which were made by cutting pieces of shells into
that shape. The taste and the workmanship of these baskets were
elegant in the highest degree, and varied into different forms and
175 patterns. Those little stools, which serve as pillows for the head,
171 were much more frequent here than at Taheitee; flattish bowls, in
515
415 which they place their meat, and spatulas with which they mix up
824 the bread-fruit paste, were likewise in great abundance, and
made of the club-wood (*casuarina equistifeolia*), which had this
name from supplying all the islanders in the South Sea with
175 weapons. The clubs of the people of this isle, were of an infinite
411 variety of shapes, and many of them so ponderous that we could scarce
manage them with one hand; the most common form was quadrangular,
so as to make a rhomboid at the broad end, and gradually tapering
into a round handle at the other. But many were spatulated, flattish,

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227
171 11. See Hawkesworth, vol. II. p.218. Also Parkinson's Journal, p. 77, and Tab. XIII. fig 25.

[437 cont.]

175 and pointed; some had long handles and a blade which resembled the
411 blade of a fleam; others were crooked, knobbed, &c. But by far
175 411 the greatest part were carved all over in many chequered patterns,
531 which seemed to have required a long space of time, and incredible
[412] patience, especially when we consider, that a sharp stone, or a
piece of coral, are the only tools which the natives [438] can
employ in this kind of work. All the different compartments
were wrought and divided with a regularity which quite surprised
us, and the whole surface of the plain clubs was as highly polished,
as if our best workmen had made them with the best instruments.
175 Besides clubs, they had spears of the same wood, which were sometimes
411 plain, sharp-pointed sticks, and sometimes barbed with a sting-ray's
[237] tail. They had likewise bows and arrows, of a peculiar construction.
The bow which was six feet long, was about the thickness of a little
finger, and when slack, formed a slight curve. Its convex part was
channelled with a single deep groove, in which the bow string was
lodged, and which was likewise big enough sometimes to contain the
arrow made of reed, near six feet long, and pointed with hard wood.
When the bow was to be bent, instead of drawing it so as to increase
the natural curvature, they drew it the contrary way, made it
perfectly strait, and then formed the curve on the other side. The
bow-string by this means never needed to be tense, as the arrow
received sufficient moment by changing the natural bent of the bow;
the recoil of which was never violent enough to hurt the arm. Our
seamen, unacquainted with the nature of these weapons, broke several
175 of them by drawing them like other bows. The immense quantity of
181 arms belonging to the natives, corresponded very ill with the pacific
609
439

175 [438 cont.]
181 disposition, which had strongly [439] shone through their whole
609 behavior towards us, and which still manifested itself in their
439 readiness to dispose of them. It is probable that they have sometimes
175 124 quarrels amongst themselves, or wage war with the neighbouring
islands, but we could by no means discover any thing from their
conversation or signs, which might have served to throw a light on
175 this subject. The several articles above enumerated, together with
439 all their sorts of cloth, their elegant mats, which for workmanship
171 and variety excelled even those of Taheitee, and a great many other
trifles too tedious to mention, they brought to sell, and with great
eagerness exchanged for small nails, and sometimes for beads. But
in respect of the latter their taste was different from that of the
Taheitians; for the latter always chose those that were transparent,
but the people of Ea-oowhe would take no other than black opaque
175 beads, with red, blue, and white stripes. We traded with them till
439 dinner-time, and then re-embarked in order to return on board the
[648] ships; but were obliged to sit down contented with the loss of a
grapnel, which the natives had contrived to steal almost as soon as
it was let down into the water. Their kind looks and acclamations
followed us till we returned on board, where a number of them traded
in their canoes with the same sorts of goods which we had purchased
175 on shore. We saw several persons among them afflicted with leprous
164 complaints, in some of which the disorder had risen to a [440]
high degree of virulence; one man in particular had his whole back
and shoulders covered with a large cancerous ulcer, which was
perfectly livid within, and of a bright yellow all round the edges.
A woman was likewise unfortunate enough to have all her face destroyed

[440 cont.]

175 by it in the most shocking manner; there was only a hole left in the
164 place of her nose; her cheeks were swelled up and continually
oozing out a purulent matter; and her eyes seemed ready to fall out
[439] of her head, being bloody and sore. These were some of the most
miserable objects I recollect ever to have seen; and yet they seemed
to be quite unconcerned about their misfortunes, traded as briskly
as any of the rest, and what was most nauseous, had provisions to
sell.

175 After dinner Dr. Sparrman remained on board with me, in order
122 to arrange our acquisitions of the morning, and my father again
[126] accompanied the captains to the shore, with a view to collect a fresh
supply. They returned about sunset, and my father gave the following
account of this excursion.

175 "At the landing-place the natives welcomed us with shouts as in
439 the morning, and the croud being as numerous as ever, the trade was
carried on very briskly, but provisions were scarce, and shaddocks in
particular not at all to be had, as the season was not yet sufficiently
175 advanced. Mr. Hodges, myself, and one servant, left the trading-place with
123 [441]two of the natives, whom we engaged to become our guides in
case of necessity, and walked up the hill to view the interior part
175 of the country. Our walk lay through a number of rich plantations or
311 417 gardens, enclosed as before mentioned with fences of reeds, or with
137 quick-hedges of the beautiful coral flower, (erythrina coralloendron.)
175 Beyond these we entered into a lane between two enclosures, and
311 487 observed bananas and yams planted in rows on both sides, with as much
[244] order and regularity as we employ in our agriculture. This lane
[245] opened into a fine extensive plain, covered with rich grasses. Having

[445]

175 [565] As soon as the captains had delivered their present, they returned to the ships, and the chief came on board with us. Our anchor was weighed, our sails were spread to the wind, and we forsook this happy island when we had scarce discovered its beauties. [439] [565] [609] The chief, after selling a number of fish-hooks for nails and beads, hailed one of the canoes which were passing by, and left us with looks which spoke his friendly, open disposition.

[101] [133] We now sailed along the western shore of Tasman's Amsterdam island, which the natives called Tonga-Tabboo, and found it a very [131] low flat land, compared with that which we had left. The middle of this island is nearly in 21° 11′ S. latitude, and 175° W. longitude. [133] Its highest elevation above the level of the sea, appeared to the [311] [184] eye never to exceed six or seven yards perpendicular. On the other hand, its extent was much more considerable than that of Eaoowhe, and by the help of our spying-glasses, we discovered the same regular plantations which we had so much admired there, and saw the shores crouded with inhabitants, who gazed at us, probably with as much attention as we bestowed upon them. When we were about half way between both islands, or nearly three leagues from each, we were met by several canoes full of men, who attempted to come along-side, but as we happened to be too far to windward, they could only fetch the Adventure, where they came on board.

175 133 [446] In the afternoon we approached the northernmost end of the island, and perceived some small isles connected by reefs to the eastward. Their situation and that of the shoal to the northwest, where the sea broke with great violence, convinced us that we were now arrived at the very place where Tasman anchored in 1643,

[446 cont.]

175 and which he called Van Diemen's Road. Here we dropped an anchor
133 upon a rocky bank, and were immediately surrounded with numbers of
the natives, some in canoes, and some swimming, though we lay
175 about a quarter of a mile from the shore. We found them to be of
439 the same nation which inhabited Ea-oowhe, and their mercantile turn
prompted them to bring an immense quantity of their cloth, mats, nets,
utensils, arms, and ornaments, which they eagerly exchanged for
beads and nails. The ships were no sooner moored, than a prohibition
was made against purchasing curiosities, and the natives were told
to bring coco-nuts, bread-fruit, yams, and bananas, as well as hogs
and fowls, of which we had already learnt the names. We purchased
a small quantity of provisions the same evening, to give an example
to the rest of the inhabitants, who were obliged to take their merchandize on shore again. The good effects of this step appeared
the next morning, when the natives returned from shore at day-break,
175 and had loaded their canoes with vegetables and fowls. Many of
609 them came on board as freely as if we had been old acquaintances,
175 and did not [447] appear to have the least idea of distrust. One
565 of them, a well made man, with a handsome open countenance, seemed
to have some authority among them, like the chief whom we had seen
[431] on Ea-oowhe. He descended into the cabin, acquainted us that his
name was Attahha, and received several presents, among which he
sat a high value on iron, and on red European broad cloth. After
175 breakfast he went on shore with us in the pinnace. A coral reef
133 surrounded the coast, at the distance of a musket-shot, and a
single narrow pass admitted us within it, where we found the water
so full of rocks and so shallow, that we were obliged to be carried
out of the boat.

[447 cont.]

000 175 out of the boat. A party of the marines were posted on the beach
648 in case of danger, to protect the captain's clerk, who traded for
[439] provisions. The natives did not express either surprize or dislike
at this proceeding, perhaps because they were unacquainted with its
175 meaning. They received us with acclamations of joy as at Ea-oowhe,
609 and desired us to sit down with them on the rocks along shore, which
133 consisted of coral, and were covered with shell sand. We purchased
175 439 several beautiful parroquets, pigeons, and doves, which they brought
231 to us perfectly tame; and our young Borabora-man Mahine (or Hedeedee)
237 traded with great eagerness for ornaments made of bright red
feathers, which he assured us had an extraordinary value at Taheitee
175 and the Society Islands. Here they were commonly pasted to aprons
292 used in their dances, and made of the fibres of [448] coco-nut,
237 824 or fixed upon banana leaves, forming rhomboidal frontlets or diadems, &c.
000 With a degree of extasy which gave the greatest weight to his assertion,
he shewed us that a little piece of feathered-work, as broad as two
or three fingers, would purchase the largest hog in his island.
114 Both this youth and O-Mai were much pleased with the inhabitants of
175 these islands, and began to understand their language tolerably well.

175 We left the beach after the first acquaintance with the natives,
311 and ascended a few feet into a wild forest consisting of tall trees,
[137] intermixed with shrubberies. This wood though narrow, being in
many places not above one hundred yards wide, was continued along
the shore of Van Diemen's road, being more or less open in various
parts. Beyond it the whole island was perfectly level. We walked
across a piece of uncultivated land, about five hundred yards wide,
which adjoined to the wood. Part of it appeared to have been planted

[453 cont.]

175 that if we suppose a gradual diminution of the sea, at the rate
133 which they pretend to have observed in Sweden (14), the emersion of
this island must be of so modern date, that it is matter of astonishment how it came to be covered with soil, herbage, and forests; so
well stocked with inhabitants, and so regularly adorned as we really
175 found it. We picked up a quantity of shells at the foot of the steep
126 rock, where we sometimes waded in water to the knees upon a reef, on
175 account of the flood tide which was advancing. We likewise met with
439 several natives returning from the trading-place, who sold us a
[286] number of fish-hooks and ornaments, a fish-net made like our casting-nets, knit of very firm though slender threads, some [454] mats and
[292] pieces of cloth. We likewise purchased of them an apron, consisting
[531] of many wheels or stars of plaited coco-nut fibres, about three or
[286] four inches in diameter, cohering together by the projecting points,
and ornamented with small red feathers and beads cut out of shells.
175 Finding that the water encreased too fast upon us, we looked out
123 for an ascent to the top of the rock, and having with some difficulty
241 found one, we re-entered the plantations, where we observed the weeds
175 rooted out with great care and laid in heaps to dry. After a long
123 walk, during which we missed our way, and engaged one of the natives
to become our guide, we entered a long narrow lane between two fences,
which led us directly to the Fayetooca or burying-place we had left
before. Here we found captains Cook and Furneaux, and Mr. Hodges,
[565] with a great number of natives, seated on the fine lawn. They were
in conversation with an old blear-eyed man, who had a good deal of
weight among the rest of the people, and was always accompanied

14. See the Memoirs of the Swedish Academy of Sciences at Stockholm.

175 [454 cont.]
123 by a number of them wherever he went. We were told that he had
565 conducted our gentlemen to two *fayetòocas*, and had pronounced a
[788] solemn speech or prayer, with his face directed to the building,
but at times turning to captain Cook, and addressing the words to
him, in a questioning tone. In these moments he always made a short
pause, as if he expected an answer, and seeing a nod ensue, proceeded
175 with his speech. Sometimes, however, his memory [455] seemed to fail,
565 upon which he was prompted by another man who sat near him. From
this ceremony, and the place where it was performed, we conjectured
175 that he was a priest. However, as far as we could see into their
771 religious notions, it did not appear that they practised any kind
171 of idolatry; neither did they seem to have any particular veneration
for birds like the Taheitians, but to worship a supreme invisible
[764] Being. What may have induced them, as well as the people of Taheitee
and the Society Isles, to unite their repositories of the dead and
000 their places of worship in one, remains in obscurity. The religious
tenets of a people are the last things which strangers become acquainted with, whose knowledge of the language is commonly too
imperfect. Besides this, the dialect of the church frequently differs
from the common dialect, and thus religion is veiled in mysteries,
especially where there are priests to take advantage of the credulity
of mankind.

175 From this place we returned to the sea shore, where a brisk
439 trade for vegetables, fowls, and hogs was carried on. Here we bought
[293] a large flat shield or breast-plate, of a roundish bone, white and
[237] polished like ivory, about eighteen inches in diameter, which appeared
000 to have belonged to an animal of the cetaceous tribe. We likewise

[458 cont.]

175 of the inhabitants, under the shade of the wild wood which lined the
[609] coast. There they lighted numerous fires, and were heard conversing
175 during the greatest part of the night. It seems their eagerness
439 to continue the trade with us, would not permit them to return to
their dwellings, which were probably situated in the remotest part
of the island. Our goods were in great repute with them. Nails,
which the natives commonly hung on a string round the neck, or
stuck through the ear, were very current for fowls, and smaller ones
175 for bunches of bananas, and coco-nuts. Their fowls were the largest
231 we had ever seen, and extremely well-tasted. Their plumage was
commonly very glossy, and beautifully coloured with red and gold.
175 Our sailors bought numbers of them, in order to enjoy the barbarous
439 amusement of seeing them fight. From the time of our leaving Huahine,
000 they had daily followed the cruel occupation of tormenting these poor
birds, by trimming their wings, and incensing them against each other.
They [459] had so well succeeded with those of Huahine, that some of
them fought with the most desperate fury of true gamecocks; but
they were well disappointed with those which they purchased at Tonga-Tabboo, and as they could not make them fight, they were forced to
eat them in revenge.

175 Early the next morning,[A] the captain's friend Attahha or Attagha
565 (see p. 447.)[B] came on board in one of the first canoes, and breakfasted with
[291] us. He was drest in mats, one of which, on account of the coolness of
175 the morning, he had drawn over his shoulders. He resembled all other
565 uncivilized people in the circumstance that his attention could not be
114 fixed to one object for any space of time, and it was difficult to pre-
[126] vail on him to sit still, whilst Mr. Hodges drew his portrait. An

[A] [5 October--Analyst.] [B] [i.e. p. 37-8 of HRAF manuscript--Analyst.]

[463 cont.]

175 admirable similarity of follies, the modes of the former inhabitants
302 of Europe are in full force among the modern antipodes; and our
171 insipid beaux, whose only pride is the invention of a new fashion,
are forced to share that slender honour with the uncivilized natives
of an isle in the South Seas.

175 My father did not return from his excursion till the evening,
having proceeded a considerable way towards the south end of the island.
At noon a smart shower had obliged him to retire into a plantation
175 and to take shelter in a house. Fortunately for him the owner of this
609 cottage was at home, and immediately invited him to sit down on the
352 clean mats which covered the floor, whilst he went to provide some
175 refreshments. In a few moments he brought several coco-nuts, and
609 having opened his oven under ground, took out some bananas and fishes,
252 354 wrapped in leaves, which were perfectly well done and delicious to
175 the taste. The manner of cooking provisions is therefore exactly
609 the same as at Taheitee; nor are the natives less inclinable to acts
171 of hospitality and benevolence, though these virtues were not so [464]
252 frequently exercised towards us, because we commonly found the
country quite deserted, the inhabitants being drawn together towards
175 our trading-place. The hospitable man was rewarded with nails and
431 beads, with which he performed the *fagafetai*, by laying them on his
439 head, and accompanied my father back to the beach, carefully carrying
201 a number of spears and clubs for him, which he had purchased on the
road.

175 The harmless disposition of these good people could not secure
648 them against those misfortunes, which are too often attendant upon
[171] all voyages of discovery.[A] Our goods tempted them at least as much

A [6 October--Analyst.]

175 [*470 cont*.]
648 venture to determine, though I am inclined to adopt the former opinion.
609 000 Captain Wallis probably saw Cocos and Traitors Islands in 1767, which he called Boscawen's and Keppel's Isles; but his people did the natives no hurt, except frightening them with the discharge of a single musket. M. de Bougainville saw some of the north-eastermost isles belonging to this group, of which the inhabitants had the same general character. He called his discovery the *Archipel des Navigateurs*,
175 justly enough, as many ships have fallen in with it. Since Tasman's
648 time, no other navigator has had any intercourse with the isle of
175 Amsterdam, which he discovered, previous to our arrival. During a
178 space, therefore, of one hundred and thirty years, they have not materially changed their manners, dresses, way of living, disposition,
175 &c. &c. Our ignorance of their language prevented our obtaining
439 positive proof that they still preserved, by tradition, the memory
[124] of former visitors; but they possessed some nails, which must have
[412] been brought to the island in Tasman's time. [471] We purchased one of these nails, which was very small and almost consumed with rust, but had been carefully preserved by being fixed on a wooden handle, probably to serve the purposes of a googe or borer, and is
[415] now deposited in the British Museum. We likewise bought some small earthen pots, perfectly black with soot on the outside, and suspected them to be memorials of Tasman's voyage; but afterwards we rather believed that they were manufactured by the natives them-
175 selves. The accounts of Schouten, Tasman, and M. de Bougainville agree
171 with ours, in respect of the agility with which the natives committed
[648] petty thefts. Tasman and captain Wallis have likewise observed their
[304] [565] custom of cutting off the little finger; and according to Schouten's

[472 cont.]

175
123 before me, and took that opportunity of running off. My friend
[648] joined me immediately; and we concluded, that if there was
something treacherous or vicious in the behaviour of this fellow,
our separation was also imprudent, because it had furnished him
with an opportunity to exercise his talents. We continued strolling
about for some time, without [473] any sinister accident, and returned
to the trading-place on the beach, where we found almost all the
175 people whom we had left. Many of them were now seated in different
571 little groups, which appeared to be so many separate families, and
[517] consisted of persons of various ages and sexes. They were all in
conversation, of which no doubt the arrival of our ships furnished
the topics; and many of their women amused themselves either with
175 singing or playing at ball. There was a young girl in particular,
142 whose features were more regular than common, her eyes sparkling
302 with vivacity, her whole frame admirably proportioned, and, what
was most remarkable here, her long jetty hair hanging down in
175 graceful curls on her neck. This girl, lively and easy in all her
524 actions, played with five gourds, of the size of small apples,
perfectly globular; she threw them up into the air one after another
continually, and never failed to catch them all with great dexterity,
175 at least for a quarter of an hour. The musical ladies again performed
533 the same tune which we had already heard at Ea-oowhe, the different
184 voices falling in with each other very harmoniously, and sometimes
175 joining all together as in chorus. Though I never saw the natives
535 of these islands dance, yet we may add this amusement to the list
292 of those which they are acquainted with, from their own accounts
124
439 and gestures whenever they sold us their aprons made of stars of

175 [473 cont.]
535 of coco-nut core, and ornamented with shell-work and red feathers,
124 or such [474] as were curiously wrought of mats in resemblance of
[292] [439] fretwork. From these gestures I have great reason to suppose that
[171] their dances are of a dramatic kind, and public, like those which
175 I have spoken of in the Society Isles, (See pag. 398). Schouten
171 and Le Maire likewise strongly confirm this supposition by their
[535] account of the dances at Horne Island (24). It appeared, upon
the whole, that the customs and language of these islanders have
a great affinity with those of the Taheitians, and that it would
not therefore be very singular to find a coincidence even in their
amusements. The greatest differences between these two tribes,
who must have originated from the same stock, seem to be owing to
the different nature of their islands. The Society Isles are well
furnished with wood, and the tops of their mountains are still
[311] covered with inexhaustible forests. At the Friendly Isles this
[137] article is much scarcer, the surface (at least of those which we
[342] have seen) being almost entirely laid out in plantations. The natural
consequence is, that the houses are lofty and of immense extent in
the first group of islands; but much smaller and less convenient in
[501] the last. In one the canoes are numerous, I may almost say innumerable,
and many of a vast size, and, in the other, very few in number, and
175 much smaller. The mountains of the Society Isles continually attract
171 the vapours from the atmosphere, and many rivulets descend [475]
312 from the broken rocks into the plain, where they wind their serpentine
course and glide smoothly to the sea. The inhabitants of those
islands take advantage of this gift of bountiful nature, and not

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24. See Mr. Dalrymple's Collection of Voyages, vol. II. p. 47.

[478 cont.]

175 for water, and the master had been sent to the eastward to survey
122
312 Maria Bay, and the low isles which shelter that harbour. The situation
175 of these islands he found very exactly represented in the charts
136 of the ever accurate Tasman, and on one of them where he landed,
he saw an astonishing number of speckled water-snakes, with flat
tails, which are harmless, and distinguished in the system of
175 Linnaeus, by the name of *colubri laticaudati*. In our branch we
126 had not been unsuccessful, this little island having afforded us
137 several new plants, among which was a new species of jesuit's bark,
or *cinchona*, [479] of which the bitter bark may perhaps be equally
175 efficacious with that of Peru. We also collected several birds
231 unknown before, and purchased some live species, particularly of
[126]
[439] the parrot and pigeon tribe, of the natives, who seem to be very
[136] expert fowlers. But it did not appear to us, that the pigeons,
[554] which many carried perched on crooked sticks, were marks of
[171]
distinction, though Schouten at Horne Island where the same custom
175 prevails, is of that opinion (25). In the last boat which
609 had brought our people on board in the evening, the Latoo or king
had sent a great quantity of vegetables, together with a whole hog
roasted, or dressed under ground, as a present to the captain. In
the morning therefore, we embarked early in the pinnace, and rowed
[152] to the shore to make a present in return. We found the Latoo sitting
at a little distance from the beach; and captain Cook gave him
a shirt, a saw, a hatchet, a brass kettle, and several articles
of less moment, all which he received with sullen gravity;
this deportment he never varied, except once, when he was seen to
smile as he conversed with Attagha.

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565 25. See Mr. Dalrymple's Historical Collection,
431 vol. II. p. 46.

[479 cont.]
000
175 smile as he conversed with Attagha. Among the croud, we observed
302 a single man, who differed from all the rest, by having suffered
184 his hair to grow, and having twisted it into several round bunches,
which hung wildly about his ears. This man, and the young girl
mentioned page 468.^A were the only persons we met with, who had
[480] not conformed to the general custom of cutting off the hair.

175 After a short conversation with the natives, of whom we bought
439 a variety of their tools, on account of their elegant carving, we
returned on board to breakfast, and immediately after weighed the
175 anchors and set sail. The provisions lying in confused heaps on
the decks, prevented our going into the open sea immediately. We
therefore kept standing off and on, under shelter of this island,
and did not take our departure till towards evening, when we shaped
our course southerly.

The next morning [October 8], the weather being nearly calm,
we caught a shark, eight feet long, consequently bigger than any
175 we had seen before. In the afternoon we saw the little isle which
101 Tasman calls Pylstaerts Island. This name refers to the birds,
175 which the Dutch navigators observed there, and which in all proba-
136 bility were tropic birds. Pylstaert literally signifying arrow-tail,
alludes to the two long feathers in the tail of this bird, from whence
175 its French name of paille-en-queue is likewise derived (26). Its
131 26. See Mr. Dalrymple's Collection, vol. II. p 75.
where they are called wild ducks.

175 latitude is 22° 26' S. and its longitude 170° 59' W. A contrary S.
W. wind which sprung up towards evening, obliged us to cruize about
till the 10th in the morning, when we came [481] in sight of this
[133] little islet again. It is of a moderate height, and has two hummocks,

^A [See p. 55 of HRAF manuscript--Analyst.]

[168 cont.]

133 and tufts of trees, which gave them a most enchanting appearance.
137 The houses were seen in great numbers among the trees on the beach,
175 and the islands had an air of happiness and affluence. One of these
361 181 little gardens rose at its east end into a white perpendicular cliff,
175 with something like horizontal strata. At our distance it looked
193 like the bastion of a ruined fort, and being fringed [169] with
137 175 woods and palms, formed altogether a romantic view. Towards noon
609 the wind slackened, and canoes put off from different islands to visit
175 us, though they were above a league distant. Some of them worked so
hard, that they were near us in less than an hour; and when they were
about to musket-shot off, they began to call to us from time to time,
still continuing to paddle towards us. Three persons were in the
canoe, exactly like the natives of Ea-oowhe and Tonga-Tabboo, whom
● 439 we had seen in October, 1773. When they were along side, a few beads
175 and nails were presented to them, for which they immediately sent a
[824] [609] bunch of bananas, and some delicious shaddocks (citrus decumanus) on
[592] the deck, besides a bunch of the red fruits of the palm-nut tree or
pandang (athrodactylis) which is a sign of friendship. This being
done, they sold us all the shaddocks and fruit which they had, and
609 came on board. In the mean while the other canoes arrived, and acted
175 without the least caution, as if we had been long acquainted. They
103 taught us the names of all the islands in the neighbourhood, that
175 with the high cliff they called Terrefetchea; the other, which we
admired so much for its beauty, Tonoomea: both these lay to the eastward of us. Mango-nooe (great) and Mango-eetee (little) were two
islands to the west of us; and to the S.W. beyond them lay Namoka-nooee and Namoka-eetee; the first of which Tasman has called Rotterdam

[169 cont.]

103
175 Island, or Anamocka.

122 [170] After dinner the breeze freshened, and we sailed towards
Namoka, which was the largest island of this group. The number of
439 canoes encreased about us, they came from all the neighbouring islands
175 with fruit, fish, and pigs, all which they disposed of for nails
and rags.

We had soundings all the day between these islands, at first
133
175 in forty and fifty, and afterwards, when we came nearer, in nine,
122 twelve, fourteen, and twenty fathom. About four o'clock having
hauled round the south end of Namoka, we came to, on the lee or west
side of it, where Tasman formerly lay. Our distance from the shore
133 was about a mile. The coast of the island rose fifteen or twenty feet
175 nearly perpendicular, after which it appeared almost level, having only
a single hillock near the middle. This steep shore had some resemblance
to the coast of Savage Island, which we had lately left, but the
137 richness of its woods was infinitely greater. Innumerable coco-nut
175 palms out-topped the woods, and ornamented the island on all sides.

Whilst we were coming to an anchor, one of the natives caught
648
175 the lead, and tore the line which one of our people was heaving. He
was desired to return it, but took no notice of the captain who spoke
to him. A musket with ball was fired through his canoe; upon which
he calmly removed to the other side of the ship. Our demand was
repeated, and proving ineffectual again, was enforced by a load of
small-shot, which made him smart. He instantly [171] paddled to the
head of the ship, where a rope hung overboard, to which he tied the line
439 and lead. His countrymen were not satisfied with this restitution;
685 they turned him out of his canoe, and made him swim on shore, whilst
175

[171 cont.]

439 they continued to trade with us. They sold us coco-nuts, excellent
175 yams, bread fruit, bananas, shaddocks, and other fruit. They also
[685] brought purple water-hens alive, and a fine well-tasted *sparus* ready
dressed in leaves; also a curious stringy root baked, which contained
a very nourishing pulp, of such a sweetness, as if it had been boiled
in sugar. All these things were eagerly bought for nails, which were
184 esteemed according to their size, and for pieces of our cloth. Their
175 canoes, their persons, dress, customs and language so entirely
resembled those of Tonga-Tabboo, that we could perceive no difference.
203 As this island is at a short distance from Namoka, it is not improbable
175 that the inhabitants of the latter might have heard of our arrival
there in October, 1773.

The next morning [June 27] captain Cook landed early in a sandy
193
175 cove, which is accurately described by Tasman. It is enclosed by
a reef, and has a narrow entrance for boats at the south end. It is
[439] so shallow, that our boats could only come in at high water. The
captain purchased a pig, and was conducted to a pond of fresh water
at a short distance from the beach, the same where Tasman had supplied
609 his ships with water. The hospitality of the natives was exercised
175 [172] in its utmost extent, and one of the handsomest ladies of the
[836] island complimented the captain with an offer, which was not accepted.
648 Having examined the watering place, he returned on board to breakfast,
175 and gave strict orders, that no persons infected with or lately cured
of venereal complaints should be suffered to go on shore, and that no
609 women should be admitted in the ship. A number of ladies came off in
175 several canoes, and seemed very desirous of making acquaintance with
our sailors; but after paddling about the ship for some time, they were

[174 cont.]

609 great loads for us; a nail, a bead, or even a small rag of cloth,
175 being considered as a valuable present in return. In a word, they
[431] were on all occasions ready to oblige us.

133 [175] In the course of our walk we found a large lake or lagoon
175 of salt-water, at the north end of the island, which at one place reached within a few yards of the sea. It was about three miles long, and one wide. Three little islands full of trees, arranged in most picturesque manner, served to ornament this fine piece of water, of which the shores also captivated the eye by their variety and beauty. The inverted landscape on the water, rendered this scene still more beautiful, especially as our point of view was an eminence, where many tall trees and thick shrubberies screened us from the sun.

133 No island, which we had hitherto visited, had offered so great
137 variety of views to us in so small a space; nay, we had no where found
175 such abundance of beautiful flowers, so agreeably contrasting their various tints, and mingling their sweet scents to perfume the air.
136 The lake was full of wild-ducks, and the woods and shores abounded with
439 pigeons, parroquets, rails, and small birds, which the natives brought
175 for sale.

489 At noon we returned to the trading place, where captain Cook had
175 purchased a great quantity of fruit and roots, a few fowls, and one or two small pigs. When we arrived on board, we found they had been equally successful there in the purchase of provisions. The whole poop was loaded with shaddocks, which we found a most delicious fruit, of excellent flavour; and of yams we had laid in such a quantity, [176] that we eat of them every day for several weeks afterwards instead of biscuit. Arms and utensils, the usual articles of trade of these

[176 cont.]

439 islanders, had likewise been plentifully sold, especially by several
175 people who came in large double sailing canoes from the neighbouring
609 islands. While we were at dinner, one of our shipmates was observed
175 on shore, surrounded by a great croud of natives; but no further
notice was taken of him, though he made signals for a boat. One of
our trading boats, which was sent ashore as soon as the crew had dined,
came near the place where he was stationed, and took him on board.
It proved to be our surgeon, Mr. Patton, who had been in the most
imminent danger of losing his life, by being carelessly left upon the
island without support. From his account it is very plain, that even
among these kind and well disposed people, there were some villains who
greatly resembled the wretches that infest our civilized countries.
He had left the landing place, and engaging a single native in his
service for a few beads, had rambled over great part of the island.
His success in shooting was considerable; the native carried eleven ducks,
with which he returned to the sandy cove. The boats having already left that
place, he was something disconcerted, and the croud pressed about
him, conscious that he was in their power. He walked therefore to
the rocky shore, just abreast of the ship, where our people saw him.
In going thither, the man who carried [177] the ducks endeavoured to
drop some of them; but Mr. Patton luckily turning about at that moment,
he picked them up again. The croud now pressed close about him,
and several of the men threatened him with jagged spears, whilst
nothing but the appearance of his fowling-piece kept them in awe.
[831 Several women were set on by the men, to draw him off his guard, by
126] a thousand lascivious gestures and attitudes; but his situation was of
too serious a nature to permit him to attend to them. After some time

[181 cont.]

648 because a fray had happened between the natives and our people. We joined
721 him in a few minutes, and found with him the captain, and a file of marines,
175
[519] together with two natives, who sat on their hams, and from time to time pronounced the word wòa, which signifies "friend." We supposed that the theft of Mr. Clerke's musket had given occasion to this disturbance; but this was too trifling a circumstance to be resented. The cooper, in mending the water-cask, was not sufficiently attentive to his adze, and one of the natives had snatched it up, and conveyed it away. The captain, in order to recover this valuable instrument, of which however there were no less than a dozen in the ship, ordered his people to seize several large double canoes, which had probably arrived from different adjacent islands. They performed his command, and Mr. Clerke's gun was brought back by the astonished
648 natives. But this was not sufficient, and another canoe was seized. A
721 native, who stood upon it, defended his property, which he had forfeited
164 by no offence, and took up a spear, which he seemed resolved to employ
175 with good effect. Captain Cook levelled his musket at him, and bid him lay [182] down his arms. He refused, and received a load of shot through his wrist and thigh, at the distance of eight or nine yards, which immediately
648 brought him to the ground. The volley was now fired, and a boat sent off
721 to the ship, where three canon^ directed against the highest point of the
175 island, were fired off one after another. It was thought that the natives would now have left us; but a great part still remained on the beach conscious of their innocence, and some canoes continued to ply about the
648 ship. The behaviour of one of the natives upon this occasion was so
721 remarkably stoical, that our people could not help taking notice of it.
439
497 He had a small canoe in which he always met the other canoes before they
175 reached the ship, took out what he liked, and paid their owners, a certain

^[sic! --Analyst]

[182 cont.]

648 small price in European goods, which he had before obtained by
721 barter. With his new cargo he returned to the ship, and always made
439 a considerable profit upon his bargain. As he never failed to visit
437 175 each canoe, our sailors called him a Custom-house officer. He was lying close to the ship, bailing the water out of his canoe, when the guns were discharged not two yards over his head. Notwithstanding the extraordinary concussion at so short a distance, he never once looked up, but continued to bale, and afterwards to trade as if nothing had happened.

648 We had not long rejoined the captain and his party when the unlucky
175 adze was brought back, which had [183] been the occasion of so much mischief. A middle-aged woman, who seemed to have great authority, had dispatched some of the people after it, and they returned at the same time a cartridge-box, and Mr. Patton's fowling-piece, which
[482] appeared to have been concealed under water. The wounded man was brought to us on a piece of wood carried by men. He seemed almost without sensation; and was set on the ground, whilst the natives gradually returned, and began to take courage. The women in particular, were very desirous of restoring the general tranquility, and their timid looks seemed to charge the behaviour of the strangers with cruelty. They seated themselves on a fine green turf, in a group of fifty or more together, and invited several of us to sit by them. Each of them had some shaddocks, which they broke in pieces, and distributed
142 to us with every mark of kindness and peace. Mr. Patton's friend
175 was one of the foremost, and indeed claimed the first rank among the beauties of those islands. Her nature was graceful, and her form exquisitely proportioned. Her features were more regular than any I

[183 cont.]

142 had ever seen in these isles, full of sweetness and the charms of youth.
175 Her large dark eyes sparkled with fire, and her ebon curls floated
[291] on her neck. She was of a lighter colour than the common people and wore a brown cloth which closely embracing the body immediately under the breast, but being somewhat wider [184] towards the feet, perhaps suited her better than the most elegant European dress.

648
175 Mr. Patton having been sent for, arrived with proper instruments, and dressed the wounds of the poor native, whose countrymen brought
[752] many banana leaves, which were laid on over the dressing. A bottle of brandy was given them, with directions to wash the wounds with the liquor from time to time. The wound was not dangerous, as it happened in a fleshy part; but as the distance was so short, the shot had torn the flesh very much, and made the wound very painful to the poor man. After this we distributed some beads, and departed making various signs
499 of friendship. The natives like those of Tonga-Tabboo, were strangers
175 to resentment, and continued to trade with our ship as before. They seemed to possess a truly mercantile spirit, and spared no trouble
[186] to obtain some of our goods or curiosities. Among the rest, they were much delighted with a great number of young puppies which we had taken on board at the Society Islands, on purpose to stock such islands as were not provided with them. We left two couple on Namoka, of which
502 the natives promised to take particular care. These people managed
481 their canoes with surprising agility, and swam with the greatest ease.
175 Their common trading canoes were neatly made, and polished like those
501
175 which I have already described. But those of the neighbouring islands were of a great size, and some [185] of them contained upwards of fifty people. They always consisted of two large canoes, fastened by a

[185 cont.]

501 tranverse platform of planks, in the midst of which they had erected
175 a hut, where they placed their goods, their arms, and utensils, and
where they passed great part of their time. There were likewise holes,
which gave admittance into the body of each canoe. Their masts were
stout poles which could be struck at pleasure, and their sails were
very large and triangular, but not very proper to sail by the wind.
[283] All their cordage was excellent, and they had also contrived a very
good ground tackle, consisting of a strong rope with large stones at
the end, by means of which they came to an anchor.

122 We went on shore again after dinner, as captain Cook proposed
126 leaving this island the next day. We passed through several fields
and wild shrubberies, and collected a number of valuable plants.
[439] We also made a purchase of several arms, such as clubs, and spears,
and of some utensils, viz. small stools, large wooden dishes and bowls,
in which the people prepare their victuals, and some earthern pots
719 which seemed to have been long in use. The great abundance of their
175 arms, does not agree with their good-nature and hospitable disposition,
[181] unless they quarrel with their next neighbours, like the people of
[531] Taheitee and the Society Islands. But they seemed to have spent too
much time [186] in ornamenting their clubs, to have frequent occasion
to use them.

122 At day break the next morning [June 29] we unmoored and set sail,
standing towards the island of Tofooa, on which we had again observed
439 the volcano burning during night. A whole fleet of canoes followed us
175 several miles, trading with a variety of articles, particularly their
dresses, utensils, and ornaments. Some of them likewise brought fish
of different sorts, which we had found very well tasted.

[190 cont.]

101 and have the same social and mercantile disposition. All these then
175 might be added to the Friendly Islands. They are in general remarkably
well inhabited, particularly those which we visited. Tonga-Tabboo
is almost one continual garden, and Ea-oowe, Namoka, and the adjacent
islands, are some of the most fertile spots in the Pacific Ocean.
161 We shall therefore be extremely moderate in our calculation, if we
175 suppose the number of inhabitants in all these islands does not exceed
182 200,000 persons. Their healthy climate, and its excellent productions,
164 keep them free from those numerous diseases, to which we fall an easy
175 prey, and, according to their plain and simple notions, satisfy all
517 their wants. Their progress in the arts, beyond other nations in the
53 South Sea, and particularly their refinement in music, serve to pass
175 away their time agreeably, and give them taste to acknowledge and
discern the beauties of their own exquisite forms, from whence one
181 of the strongest ties of society is derived. Their general turn is
609 active and industrious, but their behaviour to strangers more polite
175 [499] than cordial. Their peculiar propensity to trade seems to have substituted this insincere civility, in the room of real friendship, from
171 those interested and mercenary principles which commerce inspires. Both
175 [191] these characters are in direct opposition to those of the Taheitians,
[181] who delight in an indolent life, and are too hearty in their affections
[517] to confine them to outward shew and specious appearances. However
there are many luxurious individuals (arreoys) at the Society Islands,
whose moral character appears to be somewhat depraved; whilst the people
of the Friendly Islands seem to be ignorant of vices, which can only
have arisen from a superior degree of opulence.

122 The canoes which accompanied us from Namoka returned at noon

[191 cont.]

122 to several low islands, all which seemed to be well inhabited and
fertile, like so many beautiful gardens. After dinner the wind became
contrary, and abated, so that we rather lost than gained ground.
● 439 A few canoes came up with us again, for the natives spared no labour
175 to obtain our nails and rags of cloth. Towards evening we were surrounded by a little fleet, and the trade was very brisk, chiefly
for the utensils and arms of the islanders, which are made with
remarkable neatness.

648 The canoes returned once more to us the next morning [June 30]
175 putting off at day-break from all the little islands in sight. Their
502 appearance and their sailing afforded us much entertainment. Before
175 the wind they go extremely swift, being well contrived for that purpose,
and their broad triangular sail gives them a very picturesque form
122 at a distance. We left them in a short time, when the breeze freshened,
and [192] sailed towards the two high islands, which we had discovered
439 whilst we lay at anchor. In the afternoon three canoes came up
175 with us again; and one of them, with 50 men on board, traded with us
101 just as we were in the narrow passage between both islands. The larger,
175 to the southward, which is called Tofooa, appeared to be inhabited.
197 Some of the natives on board our ship told us it had fresh water,
175 together with coco-nut, banana, and bread-fruit trees. We saw indeed
[312] a number of palms, and a great quantity of the club-wood. The whole
island, though steep, was in some places covered with verdure or shrubbery.
133 Towards the sea, and especially towards the other island, the rocks
175 seemed burnt, and black sand covered the shore. We approached within
a cable's length of it, but found a depth of eighty fathom, which
prevented our coming to an anchor. The rocks towards the passage,

632 87-92) gives a good description of the town and its character.

631 Government reaches out through a system of districts, sub-districts
634 and villages. District and Town Officers act as agents of the govern-
622 ment, and although they are elected to their positions, they have lit-
622 tle or no decision-making powers. Governmental decisions and orders
621 are related to the people through the Town Officer in a village meeting
631 (fono). This system exists side by side with the traditional pattern
565 of rule by nobles. The power of nobles frequently exceeds its legal
178 limits but is accepted by the peasantry. A Tongan writing of what the
result of disobeying a noble would mean to a commoner describes it in
this manner,

> ...he and his family will be sacked from that village and have to start a new life under another noble or chief in another village or island. This happened very often in the past, even now but in a lower degree (Anonymous 1970).

The National Economy

439 The economy of Tonga is based on the cultivation and export of co-
[433] conut products and bananas. Government commodity boards are the only
[245] legal exporters of these products so that producers must sell to the
[655] government. Other products, primarily agricultural, are exported but
in 1969 totalled less than 10 percent of Tonga's total export (Tu'ipe-
lehake 1969: 4-5). Tables 1 and 2 provide information on Tongan exports
and imports.[A]

245 Recently both major crops have been threatened by factors seemingly
beyond the control of government and growers. Many coconut palms have
aged beyond their productive years, and an infestation of palms by the

[A] [See pp. 15-17--Analyst]

[TEXT CONTINUED ON PAGE 18]

TABLE 1

Tongan Exports 1969*

439
433
435

Item	Value	Percent
Bananas	$T 684.00	20.1
Copra	2,104.00	61.9
Coconuts	15.00	.4
Desiccated Coconut--Bulk	294.00	8.6
Desiccated Coconut--Prepacked	16.00	.5
Curies and Handicrafts	32.00	.9
Fruit	8.00	.2
Fungus	18.00	.5
Ground Food	17.00	.5
Vegetables	70.00	2.1
Vanilla	7.00	.2
Watermelons	35.00	1.0
Other	99.00	3.1
Total	$T3,399.00	100.0

* Adapted from Table A.5 in An Economic Survey of Tonga 1970.

TABLE 2

Tongan Imports 1969*

439
433
435

Items	Value	Percent
Flour	$T 379,000	7.4
Fish, Preserved	95,000	1.9
Meat, Preserved	180,000	3.5
Meat, Frozen	256,000	5.0
Sugar	135,000	2.7
Relief Foodstuffs (American)	41,000	.8
Beer, Ale, Stout, Wines and Spirits	110,000	2.2
Cigarettes, Cigarette Papers and Manufactured Tobacco	227,000	4.5
Soap	83,000	1.6
Drapery and all Textiles	396,000	7.8
Footwear	47,000	.9
Cement	113,000	2.2
Hardware	166,000	3.3
Galvanized Roofing and Galvanized Flat Iron	79,000	1.6
Iron and Steel Bars, Roods and Sheets	43,000	.8
Paint, Putty and Varnish	47,000	.9
Water Pipes	34,000	.7
Plywood and Wallboard	46,000	.9
Timber	182,000	3.8
Wire and Wirenetting	34,000	.7

TABLE 2 (Continued)

Tongan Imports 1969

439
433
435

Item	Value	Percent
Motor Fuels and Lubricants	$T 134,000	2.6
Motor Vehicles and Parts	301,000	5.9
Machinery and Parts	105,000	2.1
Electrical Machinery	85,000	1.8
Boats and Launches	14,000	.3
Agricultural Machinery	38,000	.7
Agricultural Insecticides	20,000	.4
Fertilizer	26,000	.5
Animal Stock Feeds	35,000	.7
Shooks for Export	23,000	.5
Other	1,614,000	31.3
Total	$T5,088,000	100.0

* Adapted from Tables A.8 and A.9 in *An Economic Survey of Tonga 1970*.

245 rhinocerous beetle has damaged a large percentage of trees. The banana
crop has recently been infected with a fungus, black leaf streak dis-
ease, to such a degree that many of the growers have stopped planting
commercial crops, and in the remaining plantations the yield is insuffi-
cient to allow profitable harvest. Damage done by careless packing and
● [439] improper storage during shipment is resulting in the dissatisfaction of
importers.

241 The 1966 Census of Tonga shows that 66.6 percent of all adult males
[162] were engaged in agriculture (Fiefia 1968: 28). Table 3 gives a full
[463] breakdown of occupation of Tongan males.[A] Agricultural techniques are a
[177] mixture of the traditional techniques-swidden agriculture, bush fallow
[178] periods, and hand tools-and modern methods including the use of ferti-
lizers, light machinery and single crop planting. The older techniques
241 are still the more widely used. A friable, well-drained, and easily-
134 worked soil is the predominant type. Maude (1965: 12-18) gives a fairly
detailed discussion of Tongan soils, their fertility, and their geolo-
gic origins.

241 Tongan agriculture is subsistence oriented and cash-cropping re-
[256] mains a secondary consideration for most Tongans, with the exception
that law requires the planting and maintenance of a certain number of
464 coconut palms. Wage labor provides income for only a few (Table 3) and
465 wages are low, averaging somewhere between $T1.00 to $T1.75 a day; most
wage labor positions are in the area of services.[1] [B]

A. [See p. 19--Analyst] B. [Footnote appears on p. 122--Analyst]

434 [457] Wage labor and gifts of money from kinsmen working overseas also contribute substantially to money income.

434 463 464 An examination of income data from twenty Puke households indicates that the economic strategy followed by Tongan peasants is security through diversity (Tables 12 and 13).A Occupational specialization is usually impractical as most income sources available are affected by (258) critically-fluctuating market conditions. As an example, the buying of mature coconuts for processing into desiccated coconut sometimes ceases completely so that a grower relying upon this market suffers periods of no income. Over time reliances on various income sources also vary considerably so that a man may do wage labor for a short time until he is fired or the job terminates, and then may fish or make copra if those activities are profitable.

592 434 439 In most households women and children, particularly girls, contribute substantially to household income by producing basketry, bark cloth, shell jewelry, and other handicrafts. These items are sold directly to tourists in Nuku'alofa or less frequently to exporters. 592 462 Women also occasionally assist their husbands in gardening and fishing.

Cash Expenditure: The Spheres of Obligation

434 511 Tongans generally view cash income as a necessity for meeting three types of obligations: obligation to support one's church (kavenga fakasiasi), obligation to educate one's children (kavenga faka'ako), and obligation to support the members of one's household (kavenga faka'api). Ideally, only after these obligations have been met can an individual

A. [See pp. 76-77--Analyst]

[TEXT CONTINUED ON PAGE 78]

434 511 spend money on entertainment, luxury items, or even investment. This concept of obligations provides some insight into how Tongans emphasize certain aspects of their life. The obligations themselves are ranked with education being first in importance, church support following closely, and household obligation being a definite least in importance. These spheres of obligation are expected to approximate an individual's income so that if he increases his wealth he increases his obligations [177] accordingly. Relatively, wealthy persons who do not accept this para- [626] digm and spend "too much" on Western luxury items, housing, cars and entertainment become the subject of social censure through gossip (lau).

511 From sample A, I obtained information on cash expenditure for twenty households; each household contributed information for five days. Table 14 presents items purchased for each household by amounts spent. [A] The most money in descending order was spent in the categories of fresh meat, bread and crackers, and tobacco products. The bulk of the fresh ● [439] meat purchase is mutton breast flaps which are actually shipped frozen from New Zealand. The price per pound is 16 cents for which one receives about 4 ounces of meat, 5 ounces of gristle, and 8 ounces of bone. Villagers use it primarily as an ingredient for a thick curry soup. The high expenditure on bread for the period is not indicative of normal expenditure for this product but the total was inflated by a single $5.00 expenditure occasioned by a funeral. The bread was required to feed those in attendance.

It can be noted from the table that few expenditures are made for durable or semi-durable goods. The category of "other" contains a few

[A] [See p. 79--Analyst]

TEXT CONTINUED ON PAGE 80

437 431 443 Persons providing services and vendors of crafts and food frequently try to keep their transactions on a gift-exchange basis so that the transaction is understood to be two persons giving each other gifts rather than one principal paying the other. The "seller" benefits in two ways from this type of transaction: he at least partially avoids being identified as a "business-boy" and he often materially benefits because the return gift is above what could be asked as a price. In this type of transaction the measurement function of money is disregarded, [439] unless the return gift is considered too small. Handicrafts are often sold by this method, befuddling tourists who wish to equate a unit of money with a certain amount of merchandise.

437 432 Transactions involving money are fakatau transactions. 'To sell' is fakatau atu, atu meaning 'away' or 'from'; 'to buy' is fakatau mai, mai meaning 'toward'. 'To pay' is totongi and as a noun means 'price'; mahu'inga also means 'price'.

431 Anything given (foaki) without explicit expectation of a return is a gift (me'a'ofa) which literally translated means 'thing of love'. At times gifts are legitimately solicited by request (kole) but built into such a request is the implicit understanding that the solicitor must be ready to meet a future request of the person from whom he has solicited. (554) [558] There is more prestige in giving than in receiving and one who is always asking for gifts without returning the favor suffers loss of prestige, but he does not usually lose his right to keep making requests. This mode of transaction is by far the most frequent non-monetary type and is a form of what Sahlins calls "generalized reciprocity" (1965: 147).

Presumably, the unintentional introduction of certain weedy species occurred 137
at the same time. A good many cultivated species, together with many weeds,
owe their presence to the visits of European ships, starting early in the seventeenth
century and continuing with increasing frequency to the present time.
Some of these alien species find optimum conditions for growth and multiplication,
and have undoubtedly played a part in limiting or even exterminating
some endemics or indigenous species through aggressiveness. A high percentage
of the usual strand and weed species includes those frequently found
on other Pacific islands and elsewhere in tropical countries.

There is little fresh water available other than that impounded in tanks [312]
from rainfall. Aside from occasional small localized areas, the low coral islands
present a monotonous repetition of plantation weeds and fallow-resting plantations
of second-growth "bush." The dominant crop is coconuts, and large areas 245
have been cleared for the extensive plantations found on most of the islands.
At present, the high market value of copra makes it the most important source [434]
of income for the islanders. The second most important export crop is bananas, [439]
of which 50,000 or more cases are shipped annually to New Zealand. The more 311
rugged topography of 'Eua, and to a somewhat lesser extent of Vava'u, prevents
the cultivation of some parts of the islands. As a consequence, there [137]
are more opportunities on these islands for the survival of native species. Some 313
of the islands, especially 'Eua and Kao, still have significant timbered areas
with some of the tree species reaching a diameter of more than a meter and
offering a source of timber. Lumbering operations are being developed by the
government on 'Eua which, together with the fact that more and more of the
forested land is being cleared for new plantations, threaten to reduce or eliminate
many of the native species. Too, this has caused a soil erosion problem [311]
on some of the slopes. Lumbering operations on the volcanic islands of Late, [504]
Tofua, Kao, and Tafahi, because of the present lack of harbor facilities, are all
but impossible. It seems improbable, therefore, that much timber will be cut
on those islands in the immediate future, and it is on those islands that many
of the native species will have the best chance of survival. However, with any
marked increase in population, it will eventually become necessary to colonize
and develop such islands.

The climate of Tonga is pleasant during most of the year. The annual 132
temperature ranges from a low of around 75° F. in July and August to a high
of 85° to 90° F. from January to March. Slightly higher or lower temperatures
are not infrequent. The humidity is comparatively high, ranging from about
88° in the warmer months to a low of around 72° in the winter period. The
average mean rainfall is about 80 to 90 inches, with the wettest season during
the first six months of the year.

The collections upon which this report is based were made on the islands 101
of Tongatapu, 'Eua, Nomuka, Lifuka, Kao, Vava'u and Niuafo'ou between 126
February and June 1953. Projected visits to 'Ata, Tofua, and Late were aban-

C. nucifera is cultivated throughout the world in tropical countries for its 137
many useful properties. Copra, the dried flesh of the seed, is the most impor- 245
tant export crop of Tonga. Large plantations of coconut are located on all 824
of the main islands. Trees also grow spontaneously outside of cultivation. [439]

Tongan name: *niu*. The following varieties are recognized:

Niu kafa: fruit is large and long, but nut is very small; husk fibers are used in making a type of cordage called *kafa*. [283]

Niu kula: fruit is very small, scarcely more than 3 inches long, containing little or no liquid, cavity being filled with white pulp or jellylike substance.

Niu leka: very slow-growing variety.

Niu matakula: base of fruit where stalk joins is red.

Niu mea: fruit is yellowish in color.

Niu mealava: fruit-stalk scar has a red ring surrounding it.

Niu ta'okave: fruits are very small, some yellow and some green.

Niu tea: fruit is pale green.

Niu 'ui: fruit is green.

Niu 'utongau: fruit is mostly green, husk sweet and edible.

Niu tui: fruit is very large, mostly green but sometimes yellow.

FAMILY ARACEAE

Genus **Epipremnum** Schott

Epipremnum pinnatum (Linnaeus) Engler, Pflanzenr. 37 (IV. 23B):60, 1908. 137

High-climbing, much-branched, coarse, subherbaceous vine. Leaves alternate, ovate-oblong, acuminate, base rounded to cordate, entire, variously perforated with large holes, or larger leaves pinnately divided nearly to midrib into numerous oblong lobes, up to 40-60 cm. long. Flowers small, crowded on a cylindrical, fleshy spadix 2-3 cm. thick and 8-10 cm. long, spadix subtended by a leaflike, lanceolate spathe as long as, or longer than, spadix.

Tongatapu: in forest near sea below Fu'amotu village, Mar. 4, 1953, *Yuncker 15172.*

'Eua: *Lister;* in dense forested ravine north of Fuai, Mar. 19, 1953, *Yuncker 15369.*

Vava'u: near summit of Talau, west of Neiafu, May 24, 1953, *Yuncker 16158.*

Common throughout Tonga in forested areas. Burma to the Philippines and Polynesia.

Raphidophora pertusa var. *vitiensis* Engl. in Hemsley's list.

Tongan name: *alu*.

The long slender stems (called *kaho alu*) are used in the weaving of baskets. [285] [824]

Genus **Colocasia** Schott

Colocasia esculenta (Linnaeus) Schott, Melet. Bot. 1: 18, 1832. 137

Acaulescent, tuber-forming herb. Leaves ovate-cordate, peltate, entire, acute to acu- 262
minate, of various sizes but mostly 30 cm. or more long, petiole sheathing at base. Flowers 824
small, on a fleshy spadix surrounded by a yellowish or reddish spathe.

It is probable that some of the above varieties are incorrectly placed as to 137
subspecies, as it was not possible to determine their exact relationship. So far 262
as I know, no wild species of *Musa* occur in Tonga. Plantains and bananas 824
are grown extensively throughout the group and are an important item in the diet of the Tongans. A comparatively large number of bunches are shipped [439]
annually to the New Zealand markets.

FAMILY ZINGIBERACEAE

Genus **Zingiber** Adanson

Zingiber zerumbet (Linnaeus) J. E. Smith, Exot. Bot. 2: 103, pl. 112, 1804.

Herbaceous plant with pubescent, leafy branches rising to about 1 m. tall from a thickened, fleshy rhizome. Leaves alternate, distichous, entire, oblong-elliptic or lanceolate, acuminate, clasping the stem at the base, up to about 30 cm. long and 5 cm. wide, pubescent beneath. Flowers white or pale yellow, in a large, bracteate, cone-like spike at top of a leafless scape up to about 30 cm. tall, bracts rounded, overlapping, becoming red.

Tongatapu: in a low wet area near Nualei, Mar. 9, 1953, *Yuncker 15221.*

'Eua: in thicket at margin of forest near summit of central part of eastern ridge, Mar. 24, 1953, *Yuncker 15455.*

Vava'u: *Crosby.*

Tafahi: at summit of Piu 'o Tafahi, Dec. 11, 1951, *Hürlimann 459.*

Niuatoputapu: on southward slope of mountain ridge opposite Vaipoa, Dec. 25, 1951, *Hürlimann 636.*

Frequent in thickets throughout the group. An Asiatic species now widely distributed in warm countries.

Tongan name: *angoango.*

The rhizome is used in preparing medicines. [278] [824]

Genus **Hedychium** Koenig

Hedychium coronarium Koenig, Retz. Observ. Bot. 3: 73, 1783.

Erect herb, stems up to 1 m. tall from a stout rootstock. Leaves distichous, oblong-lanceolate to lanceolate, acuminate, up to 50 cm. more long and 10 cm. wide, petiole short clasping stem with an elongated sheathlike portion. Flowers very fragrant, white turning yellow, perianth tube slender, up to 6 or 8 cm. long, in dense, terminal, bracteate spikes, bracts oblong to obovate or lanceolate, imbricate.

Tongatapu: in moist area along trail below Fatai village, Mar. 10, 1953, *Yuncker 15263.*

'Eua: in Pangai village, Mar. 25, 1953, *Yuncker 15488.*

Common in villages as an ornamental and occasionally as an escape. An [247]
Indian species now widely distributed in warm countries as an ornamental. [824]

Tongan name: *tevunga.*

The aromatic parts of this plant are used to scent oil. [303] [824]

Fish nets (*finaki*). A fish net is made from the leaves of the
226 coconut palm. The roots are plaited into a round net very much like
[286] a lobster net; when ready it is sunk in the sea, weighed down by a
stone or some heavy weight. The fish swim into an opening in the net.

USES OF THE COCONUT PALM

The coconut tree is considered by the natives to be the most useful
824 tree in Tonga. It is indispensable in house building, and the number
[181] of articles made from its wood and leaves is remarkable. The heart
[278] of the tree is used for making walking sticks, the bark for medicine,
[226] the roots for a kind of fish net called *finaki*, the leaves for baskets,
[285] [342] thatching houses, and making mats and flooring. The uses of the
[352] fruit are innumerable.

824 As a medicine the fruit is given to pregnant women to increase
853 the supply of breast milk. For this the green nuts are used. A new-
[843] born child is always given *namoa*, which is made from the roasted
flesh of the ripe nut. This roasted flesh is chewed by someone,
usually a woman, and when taken from the mouth is rolled in a piece
of *fetaaki*, squeezed, and the juice given to the child. This is his
only food for four days.

Ripe coconuts are valuable for copra, which is the dried flesh.
824 [439] This is sold to European markets largely, where it is used for soap,
candles, oils, and a variety of products. The shells of the coconut are
[314] burned and made into charcoal (*malala*) for ironing. Kava cups also
[415] are made from the shells.

No native food is considered complete without the presence of
824 coconut in one form or another. Yams, fish, and bananas are usually
262 [252] cooked in the milk extracted from the flesh of the ripe coconut and
strained through coconut fiber.

Brooms are made from the ribs of the leaf, and the leaf stem is
824 [412] used for stirring oil, also as weights for tapa which is spread on the
[287] ground for printing. The bark (*kaka*), which surrounds the leaves
[415] at the body of the palm, is used to make bags for wrapping arrow-
root and medicines.

The several varieties of coconut palms have different uses.

VARIETIES OF COCONUT PALMS

245 KAFA. The nut is gathered when green and husked, the husk put in a native
824 oven and left for two weeks, after which it is taken out and beaten to re-
[285] move all the dust. The fiber thus obtained is plaited into mats.

The growing contact with Fiji had quite a significant impact on 175
the new developments in Tonga. The Tongans highly prized a 177
variety of products which were either not available in their home
islands or which were superior to anything of a similar kind which 175
they had at home, such as spears, bowls, huge double canoes, 177
pottery, sandalwood and the scarlet feathers of the Fijian parrots.
So coveted were these articles that, in spite of the difficulties of 439
sailing to Fiji, the voyages gradually became regular (Thomson 175
1894:320). Seemann (1862:240-1) wrote: 177

> Up to this period the Tonganese had been peaceful traders . . . 484
> Gradually they adopted a different line of policy. Being men of
> athletic frames, of courage and daring, they were often asked to [439]
> assist in the feuds in which chiefs friendly to them engaged, receiving
> canoes and other property in return for their services. From being
> mere mercenaries, they gradually began to act on their own responsibility, readily avenging every outrage from time to time committed
> against any of their countrymen on the smaller islands of the eastern
> group. . . .

Such exploits became extremely popular among young chiefs in
Tonga who were thirsty for excitement and renown. They only had [554]
to join a party going to Fiji for canoes to place themselves in the
way of gaining honour and fame enough to satisfy the most
ambitious, for in Fiji 'there were alarums and excursions in plenty,
war and rapine, easy living at the expense of their Fijian hosts,
and freedom from the restraint of their elders' (Derrick 1963:122).

From these experiences, the young chiefs brought back to Tonga 175
not only goods but also some cruel and revolting habits which were 177
regarded by some of their fellow chiefs at home with great
admiration. A list of these barbarities preserved in the old traditions were recorded by Thomson (1894:320):

> The cold-blooded treachery that will betray a brother to gratify the thirst for blood; the brutal ferocity that spares neither sex nor age; the depraved lust that is gratified in outrage on the dead; the foul appetite of revenge that will eat the body of a slain enemy,—all these seemed to the young Tongan the badges of a manliness worthy of imitation. He regarded the comparative refinement of his own people as effeminacy, and vied with his fellows in imitating the accomplishments of his more travelled countrymen.

chiefs. The missionaries held a different view of their own power. 797 They regarded themselves as heads of their respective stations. Therefore all their converts, chiefs and people alike, had to obey 565 them—their pastors—in all matters connected with the mission 571 (Thomas 1825-35:153). For this reason and also because they were always convinced that they had a superior background, the missionaries often condescended to and even despised the chiefs, who were naturally antagonised by such an attitude. Ata complained that Thomas had been trying to make himself chief over his (Ata's) own people (Thomas, Journal, 18 Oct. 1828).

There is little doubt that the combined opposition of the 797 Tongans led by the traditional priests and some of the chiefs during the first few years of the work of the Wesleyan missionaries in Tonga contributed significantly to the failures of Lawry at Mu'a in 1822-3 and of Thomas and Hutchinson at Hihifo in 1826-9.

The missionaries' frustration was further aggravated by the 563 strong opposition to their work from their own fellow-countrymen —beachcombers, whalers and traders who were also important [797] mediators of change in Tonga. The arrival of the First Fleet at Port Jackson on 26 January 1788, and the subsequent establishment of the first European settlement in the Pacific, had far-reaching consequences for the whole South Seas region. The impact of this penal settlement was soon felt in Tonga. Whether this was on account of Cook's reports concerning the friendly nature of the inhabitants of Tonga, or because Governor Phillip had been instructed to obtain women from the Friendly Islands as wives for convicts (Clark 1958:36), or for some other reasons, there were soon escaped convicts who found their way to Tonga and settled among the Tongans.

Ships from various European nations and the United States of [439] America frequented the South Seas, attracted by the opportunities for trade in such diverse items as sandalwood, pork, bêche-de-mer, turtle shell, coconut oil and also by whaling. Others brought [648] scientific expeditions for the exploration of the newly discovered islands. Many of these vessels visited Tonga and some were captured and their crews massacred (see Dillon 1829, I:274). Some mariners survived and, like the escaped convicts, remained

Towards the end of the eighteenth century and early in the 439
nineteenth century the discovery of rich new whaling grounds in
the western and central Pacific brought many whalers to the area.
Tonga received its share of these visits and the whalers engaged
in trade, exchanging beads, cloth, iron tools and muskets for
fresh provisions of fruit, vegetables, pork, coconut oil and other
native produce. The missionaries felt rather uneasy about the 439
presence of the whalers. Nathaniel Turner wrote: 797

> Tonga is now becoming a place of resort for shipping, especially whalers, and we may expect it will be much more so. This may in some respect be attended with advantages; but we have already cause to fear it will materially militate against our cause. (Turner to Committee, 24 April 1830, WMMS 1818-36, item A2836)

Later it became increasingly clear that the uneasiness of the 439
missionaries mainly rested upon their fears that the whalers called
at the islands not merely in search of provisions, but also to win 836
the favours of the Tongan women. Yet in this respect the teachings of the missionaries had been readily accepted. Peter Turner reported that the captain and the supercargo of a vessel which left Tonga three days previously had done 'all they could to induce some of the females to go on board but all their efforts were futile' (P. Turner, Journal, 28 April 1832).

The whalers, for their part, felt antipathy towards the mis- 439
sionaries on account of this and tried to seize every opportunity
to discredit them and undermine their work. They gained suf- 797
ficient influence to delay the conversion of some of the remote islands of the group (Amos to Committee, 11 Sept. 1857, WMMSA 1852-79, item 170).

The attention of traders to Tonga was first aroused by Captain 175
Cook's praise for the Tongans for their keen interest in trade. He
claimed that 'Perhaps, no nation in the world traffic with more 439
honesty and less distrust' (Cook and King 1784:384). Many
years later, Peter Dillon (1829, I:277) added to this view when 439
he wrote:

> I may safely say that Tonga is the best island in the South Seas for ships to recruit their supplies at, provisions there are in such plenty.

79: Lātūkefu H,I, M-4,5 (1964-1965) 1974
(1822-1875)
OU9 Tonga OU9

439 These glowing reports soon made Tonga a popular port of call for shipping. Traders of all kinds called for provisions, both before and after the establishment of the Wesleyan mission.

439 797 In general, the traders and missionaries did not get on well, but there were a few traders who were convinced that the work *of the missionaries was definitely advantageous to trade and com*merce. Many of these were sons of missionaries who had been born or brought up in the islands. These men maintained good relations with both the missionaries and native leaders, particularly those who had accepted Christianity through the work of the Protestant missionaries, and mutual respect, friendship and help prevailed among them. They did their utmost to assist the work of missionaries, who naturally reciprocated.

439 177 797 643 831 Samuel Pinder Henry, a trader son of a missionary in Tahiti, was friendly with the Tu'i Kanokupolu Siosaia Aleamotu'a of Tonga. Arrangements were made with Aleamotu'a to obtain some Tongans to accompany Henry to the New Hebrides to cut sandalwood. Sickness prevented Henry from joining his vessel which called for the men. Unknown to him, his crew had brought some prostitutes in the ship from New Zealand. When the King, who had already become a convert, found this out, he decided to prevent the Tongans from boarding the vessel. However, Nathaniel Turner, who was acquainted with Henry and knew of his reputation for assisting missionaries throughout the islands, persuaded Aleamotu'a not to break his promise and thereby penalise Henry for the misconduct of his crew. He pleaded that it would have been a different matter if Henry himself had been aboard the vessel. The King was eventually persuaded to drop his objections and the Tongans were permitted to join the ship (N. Turner to Committee, 15 May 1829, WMMS 1818-36, item A2835).

439 797 Such dissensions as did take place between some of the traders and the missionaries may be attributed to a number of factors. Certain missionaries were worried about the effects of trade upon their converts:

439 797 177 291

> The influence of trade is a source of serious apprehension to us. The people have a strong desire for our style of dress. Showy and expensive dress 'fakapapalagi' is the height of their highest aspirations. This is attended with many evils—the more they expend in dress the less

> they have to give to God—this is one evil—the more their mind is 439
> engrossed in the idea of dress (fakasanisani) beautiful, the less it
> contemplates God and things divine. (Whewell to General Secretary, 797
> Aug. 1856, WMMSA 1852-79, item 170) 177

The traders were resentful of the fact that the missionaries 291
were chiefly responsible for the growing sophistication of the
people in the art of trade. In the early days they were able to 797
fill their ships with provisions in exchange for a few guns, beads,
nails, pieces of hoop iron and cheap calico and printed cloth. 439
After the establishment of the mission and the introduction of 177
schools, the people were taught the value of money and of articles
of trade among the civilised countries. They soon refused to trade 436
for cheaper goods and wanted either payment in money or more
valuable articles. Peter Turner recorded on his way to Tonga
by ship in 1831:

> Many on board think with ungodly captains that missionaries do more hurt than good among heathens, because they cannot do with them as they did while their minds were held in darkness and error. They cannot now buy a fine hog for a large nail, or a piece of hoop iron. (P. Turner, Journal, 23 Feb. 1831)

Among the severest critics of the missionaries was the trader, Peter Dillon, and, in defending the mission against his accusations, the Reverend David Cargill (1842:29-30) wrote:

> We are informed, (page 3,) that, in 1827, the Chevalier [Dillon] 'procured an abundant supply of hogs, poultry, etc., for a few glass beads,' and that 'on his last visit it was with the greatest difficulty he could procure sufficient for his own mess, for which he had to pay dollars.' For once, I believe, the truth of any of the statements in the work which I have been examining. In 1827 the people were ignorant and poor, and would exchange their commodities for almost any article of European manufacture. In 1837 they valued 'a few glass beads' no more than their disappointed and chagrined visitor valued such trifles.

Another source of conflict was over the question of the sale 797
of liquor in Tonga. Selling 'grog' was a source of handsome
profit for the traders. The missionaries, however, objected strongly 439
to this form of trade. They were convinced that it was harmful to 273
the people and would ruin their efforts. A later missionary wrote:

> 797 Some traders not satisfied with 2 or 3 hundred percent on their goods and the difference in the value of oil (here £12—in Sydney £30 or 439 more) have introduced ardent spirits as article of trade. We expect commerce will follow in the wake of Christianity, but when it attempts 273 to unchristianize an infant Christian people we deplore it. (Whewell to General Secretary, Aug. 1856, WMMSA 1852-79, item 170)

797 Another major sorce of discord between the traders and the missionaries was over the question of women. John Thomas 439 (Journal, 19 Mar. 1831) recorded the following episode:

> 836 The captain that was here last has left an ill savour behind him . . . He tried several persons in order to get a woman for his base purposes, but I am happy to know that he did not succeed. One chief viz Tuihaatuho told him he could not let him have one and when he (the Cap.) applied to Taufaahau he told him he could not do it, that he feared Jehovah and also he met in Society and wished to do as I taught him. These things would have a very bad tendency upon the infant cause here.

Another example of the clashes over women was reported by Rabone (Journal, 2 Aug. 1836) who commented upon certain incidents in his journal which 'made us ashamed of the name of Englishmen'. It appears that a Captain Brind of the trading vessel *Tower Castle* called at the island of Rotuma and, as several Rotumans wished to go to Tonga, he offered to take them. On leaving the island he took one female as his mistress, but after being at sea four days, in a fit of drunkenness he threw her overboard. His crew rescued the woman, without his knowledge, and stowed her away. Meanwhile he had taken another female, a young virgin, who was on her way to Tonga to marry a young chief. These actions grieved both the Rotumans and the Tongans very deeply. On a later voyage, he returned to Tonga and invited some Tongans and Rotumans on board, among whom was the [721] young chief, who objected to his wife going. A fight broke out between one of Brind's men and the chief in which the young chief was killed. When this became known to the Tongans, a few hours later, they took the murderer and killed him.

439 797 The missionaries believed that the conduct of these captains was responsible for some of the 'evil doings' of the natives, of which they later complained when they returned to their home ports (P. Turner 1831-38:75).

797 destroyed. The half-hearted attempts to understand the customs of the people were more for personal security purposes than for their intrinsic or functional value to be exploited to the full for the purpose of winning the people to Christianity.

797 177 [829] Like many other Tongan chiefs of his day, Ata wanted Europeans to live under him and to serve him but not as his masters or rival 'chiefs'. Hence his resentment of what he regarded as Thomas's attempts to make himself chief among his people. Again like many other Tongans, Ata and the people of Hihifo were more interested in the missionaries' trade goods than their teachings. Their hopes of gaining material goods were frustrated by the attitudes of the missionaries on these matters. The missionaries expected the Tongans to look after their material needs, since they had left their own homes to come to Tonga to save the Tongans from spiritual and intellectual degradation. This outlook of the missionaries led them at times to what the Tongans must have regarded as unfair bargaining and even meanness.

797 439 On the missionaries' request, Ata got his people to build a fence for them but when he 'was told what we should give [for the job] he would not look at the things, but went away . . .' Ata was greatly annoyed by the smallness of the payment. The missionaries used to buy six chickens for a plane iron, a pig for a hatchet (Thomas, Journal, 24 July 1826), or 180 lb. of yams or more for a shilling. Apparently some of the chiefs resented this so much that the people were forbidden to bring anything to sell to Thomas. Thomas explained the reason for the veto: 'this is through Tofooa the Chief's brother . . . He is displeased with us, and says we wanted to buy a large quantity of yams for a spade' (Thomas, Calendar and Diary, 4 May 1827).

797 [685] Failing to get the material rewards they had expected from the missionaries, the people, with the full knowledge of many of the chiefs and probably their blessings, reverted to robbing the missionaries of their goods, threatening to burn down the mission premises and even to kill them. The situation had become so frustrating that Thomas was forced to arm himself day and night. He wrote:

> This last few nights we have had to keep a sharp look out on our premises. I have kept a gun loaded and have walked about with a

> 164 and accustomed to this plague, or pest of mankind, in these parts,
> either does not feel them, or is so unconcerned that he walks about
> as indifferent as though little or nothing ailed him.

Afflicted with their traditional ailments, as well as the newly
753 introduced ones, and lacking knowledge of either their causes or
776 cures, the Tongans attributed these misfortunes to the anger of
the gods or the displeasure of the spirits of deceased kin. Accordingly, they believed that there was a direct connection between the efficacy of medicine and the power and truth of the god, whether the medicine was that provided by the missionary or by the heathen priest.

797 Fortunately for the cause of the mission, the missionaries at
Nuku'alofa were more successful in combating disease than John
758 Thomas had been at Hihifo. Nathaniel Turner wrote of their
experience in this regard:

> I must just observe in this place that our success in this respect has been the means of bringing many over to our cause from different parts of the Island. When a cure has been wrought, the individual has gone home to his friends, and they all beholding what has been done for him, the whole family, and, in some instances, families have come over to live at Nuku'alofa, and attend to religious instruction. (N. Turner to Committee, 6 May 1831, WMMS 1818-36, item A2832)

The importance of this aspect of the missionaries' work soon became apparent, and consequently dispensary hours had become part of their regular activities.

797 The missionaries' goods—articles of trade—were highly prized
by the Tongan people, and these also helped to turn the interest
439 of the people towards the missionaries and their work. 'If I had
good trade', wrote John Thomas, 'it would not only be a saving
of time, but tend to produce a good feeling upon the minds of
the natives towards us and the good cause' (Thomas, Journal, 2
[342] June 1826). Even John Thomas's dwelling house was something
of great wonder to the people. It was the first European house
[177] built in Tonga, having two storeys with various apartments, with
panel doors in front, and glass windows, and was something
which they had never seen before. These things captured their
imagination and became the chief topics of conversation not only

79: Lātūkefu H,I, M-4,5 (1964-1965) 1974
(1822-1875)
OU9 Tonga OU9

in Tongatapu but in the other islands as well. Many were initially 797 attracted to the mission because they believed that through the mission they would get European goods. 439

The friendly relationship which existed between the missionaries and the captains of British men-of-war which occasionally visited the islands, and the respect the latter always displayed for the former, meant a lot to the missionaries and to their work. It enhanced their prestige in the eyes of the Tongans. It is easy to comprehend the reasoning of the unsophisticated mind. 'Surely', [776] they would think to themselves, 'if the God of the white people could make these men-of-war and their guns and powder, it must be true that He is the only God.'

The commander of the H.M.S. *Seringapatam*, the Hon. William Waldegrave, removed five Europeans from Vava'u who had been troublesome to the work of the missionaries (*W-M Mag.*, 1831: 712), and later the British Consul in Samoa, George Pritchard, removed two Americans who had robbed the mission and made two others work on its behalf for ten weeks (P. Turner, Journal, 1 Nov. 1849).

While it was true that one of the main obstacles to the success 797 of the mission was the objection of the chiefs, it is equally true to say that the breakthrough in the work of the missionaries was 565 significantly due to the support given it by certain important chiefs in Tonga. Like the other chiefs during the initial period of European contact, they coveted European wealth, technological knowledge and power. However, the two groups differed significantly in their beliefs as to the best method of achieving their common ambitions.

The opponents of Christian mission on the one hand strongly [776] believed that success would be achieved through the old gods and by means of the traditional religion. Significantly, most of these chiefs were more successful in the power-struggle which had been going on in the group at this time. They had no reason to doubt the validity of the old order, and they were eager to maintain the *status quo*. Others, on the other hand, became disillusioned by [776] what they interpreted as the failure of their gods to achieve what they wanted, and they began to question the validity and effectiveness of the traditional religion. Some among them decided to

> while we require a small remuneration for our medicine—they give 797
> it, and give it at any time. But we had to fix a time to give it, and
> to require our people to come at that time—or go back, in some 758
> cases, without it, as we have other duty to attend to, besides preparing
> and serving out medicine.

The missionaries' monopoly of trade, because of their possession of 797
ample supplies of articles for barter, was similarly affected. The 439
challenge this time came not only from the Roman Catholic
priests but also from traders who had by now established themselves in the various islands of Tonga.

The absence of respectable settlers in the islands before the 671
fifties had made it inevitable that King George and his chiefs relied
almost completely on the missionaries for advice concerning the 643
previous two Codes of Laws and also Tonga's foreign relations. 797
However, this situation was altered by the presence of other 563
European settlers in Tonga, from the mid-fifties onwards, who
seriously challenged the missionaries' role as unofficial political
advisers.

Another factor threatening to undermine both the prestige and 797
popularity of the missionaries was the pride of the chiefs. Con-
scious of the fact that the chiefs had been their protégés in 565
religious and educational matters, the missionaries tended at times 643
to adopt a patronising attitude which the chiefs resented. One
missionary wrote:

> The missionaries or some of them are not one with the King and the chiefs. The old missionaries know what they were, remember how they have taught them and that all they are they owe to them; on the other hand, the chiefs are beginning to be ashamed of being reminded what they were, and wish people to remember what they are—and are only—this is certainly one cause, that the missionaries are at a distance with the King or rather he with them . . . . (Baker to Eggleston, 21 April 1863, Baker 1860-79)

All these things contributed in one way or another to the gradual decline of the prestige of the missionaries in the eyes of the chiefs and helped to widen the gulf between them. Even King George, himself the hero and protector of the Wesleyan cause, was no exception.

79: Lātūkefu H,I, M-4,5 (1964-1965) 1974
(1822-1875)
OU9 Tonga OU9

439 Another cause of much displeasure to the King and his chiefs
was the growing friendship between the missionaries and the
563 traders who, during the 1870s, persistently and arrogantly opposed
[797] the Tongan government. There had been a steady increase in
the numbers of traders settling in Tonga since the latter half of
439 the 1850s. They disliked the restrictions placed by the govern-
563 ment on various features of their trading ventures. Sale of land,
656 for example, was strictly prohibited under any circumstances,
making it impossible for them to secure complete ownership of
[425] land, and sale of spirituous liquors was severely restricted. At
[273] first the traders blamed the missionaries for these prohibitions,
[797] but later they realised that the missionaries had become increas-
ingly isolated from politics. They regarded it as unthinkable that
439 they, who belonged to the 'Anglo-Australian' civilised race, should
be governed by laws produced by a half-civilised King and his
563 chiefs. One of them wrote:

> They will find their efforts to stay the tide of immigration useless . . . and England, being aware of the justice and importance of protecting, if not actually governing her subjects in these seas, the Anglo-Australian race will settle and find a living in the Friendly Islands, in spite of all the laws passed by Kings and chiefs. (*Fiji Times*, 22 Oct. 1870)

648 The belief that the British government would eventually annex Tonga was also shared by some visitors who went to Tonga. A traveller named Holt, who went there on a trading vessel in 1865, suggested in an article which appeared in one of the New Zealand papers that more people with small capital should take up business ventures in Tonga, for in a few years they would make a fortune. With regard to the question of security, he said that Britain would certainly take Tonga in the very near future (*New Zealand Advertiser*, 19 June 1865).

A few years later the principal traders sent a petition to the Governor of New South Wales complaining of the manner in which Europeans were treated, and what they were subjected to in Tonga. They requested the Governor to 'define a limit to the arbitrary authority of a government which to say the least, is and only can be semi-civilised' (Rutherford 1971:50).

This disrespect for the laws and government of Tonga led some 563
traders to defy the decisions of the law courts with contempt and 439
arrogance. Philip Payne, one of the leading traders in Tonga, refused to comply with the court's order to pay eight shillings damages to the owner of a piece of tapa cloth damaged by his horse, arguing that he did not order his horse to do the damage! He also insisted that his case should be tried by a captain of a British man-of-war.

In the main, traders and missionaries, with a few notable 563
exceptions, viewed each other with hostlity and treated each other
with disrespect. But an entirely different relationship developed 797
between these traditionally hostile factions of the European com- 439
munity towards the latter part of the 1860s and during the following two decades. Miss Eliza Ann Palmer of Sydney, who went to Tonga as a guest of the Reverend and Mrs William Stephinson from 1869 to 1871, recorded in her diary that she and Miss Payne, daughter of the aforementioned trader in Tonga, joined a missionary party which went to 'Eua one night. On the following morning Stephinson sent for a sheep farmer on the island named Parker, a hostile opponent of the government, who arrived with his horses and cart and took the party to his property (see Rutherford 1971:104). Later on in her account of the trip she wrote of another European settler: 'Mr. Young spent the evening with us, and brought his native wife. He is a well educated gentleman and belongs to one of the best families in England and yet he is content to bury himself in 'Eua with his Tongan wife' (Palmer, Diary, 1869:32-6).

The sharing of similar political sentiments seems to have been 563
a strong factor in bringing the missionaries and European traders 797
and settlers closer together. They had in common a distrust of
the direction in which the Tongan government was heading. They 648
also had no faith in its ability to withstand the test of strength 439
of international power politics in the Pacific. Consequently they looked to their home government for protection, and later they were in accord in their united stand against one of their countrymen, Shirley Baker, who decided to align himself with King George and his chiefs in their struggle to maintain Tongan independence,

563 and who was therefore accused of being a traitor to both his
797 church and his country.

Although the missionaries and traders shared a common polit-
439 ical objective, they differed widely both in their motives and in
648 their approach. The former were paternal and benevolent in their motives, restrained and tactful in their approach: the latter were generally selfish and vindictive in their motives. forthright and arrogant in their approach. Unfortunately for the missionaries, the King and his chiefs were not in a position to understand the subtleties of the situation. The very fact that the missionaries had social relations with men who were openly in opposition to and defiance of the legitimate government of the land. and who made no secret of their desire for Britain to take Tonga, and who also boasted of the certainty of Britain's doing so. must have been
797 very galling to the King and his chiefs. It was little wonder that
659 the gulf between the missionaries and the Tongan leaders in the field of politics grew increasingly wide.

The missionaries were not unmindful of their changed position with regard to local politics. They realised that they had been relegated to the background. They openly expressed their disapproval and criticism of some of the measures adopted by the King and his chiefs for the political development of Tonga. They favoured a slow, more gradual pace for the political progress which would coincide with the people's understanding of civilised ways. Just a month before the promulgation of the 1862 Code of Laws the Reverend George Lee wrote to the General Secretary of the Mission in Sydney:

> The restless love of change and the Athenian desire for something new so prevalent among the Tonganese seems to be encouraged or have means for gratification in connection with them. And as the King and Chiefs seem inclined in many things to relax the severity of punishments for crime or suspend or abolish them in favour of a more free and as they call it Sydney-like policy—though in many things their laws are far too lenient now—Many of the bad characters are in hopes of such a change in the constitution of the Islands government as will leave them to face no act as their depraved natures suggest unpunished, uncensured by those in power and unrestrained. (Lee to Eggleston, 16 May 1862, WMMSA 1852-79)

423 code, by increasing the commoners' security of tenure, greatly
182 stimulated the planting of coconuts. From 1887 onwards the
178 trend in copra production can be followed from the export
statistics. Between 1887 and 1912 the mean annual *per capita*
245 export of copra increased from 0.27 tons (1887-90) to 0.54 tons
● [439 (1908-12), a level which was maintained, apart from the period
affected by the hurricanes of 1912 and 1913 and by the First
433] World War, until 1930. The writer has found no evidence, however,
to show whether this increase was a result of the 1882
revision of the land law.[7]

423 In recent years, on the other hand, the incomplete subdivision
and allocation of allotments has restricted further planting of
245 coconuts, and is one reason for the present low level of *per
[182] capita* copra production. Many parts of central and eastern
Tongatapu, and of 'Eua and Vava'u, are only sparsely planted
[433] in palms, and in central and eastern Tongatapu people with
large customary holdings have tended to plant only part of their
land, while men who have moved to these districts and been
given a plot to garden have not wished to plant coconuts until
their tenure is secure. On several Tongatapu estates visited
during field-work, where the land had been subdivided before
the recent survey, the systematic planting of coconuts had only
begun after the subdivision and allocation of allotments. In
423 eastern Tongatapu in 1956 the mean *per capita* production of
245 copra was 0.48 tons on estates in which most or all of the land
433 had been subdivided into eight-and-a-quarter-acre allotments,
and 0.39 tons on estates in which most of the land remained in
larger customary holdings, although these means are unfortunately
based on too few villages for the difference to be statistically
significant. The recent allocation of allotments in Tongatapu
and elsewhere (together with the Coconut Replanting Scheme
which began in 1965) should result in a marked increase in the
area planted in palms, and in the opinion of some Tongans the
allocation has already facilitated the recent expansion in banana
planting by providing more growers with a secure tenure. There
are therefore grounds for concluding that when properly applied
the land tenure system does provide a good basis for agricultural
development.

423 One limitation of the Tongan system, however, is its lack of
flexibility. For a variety of reasons many men find eight and a
425 quarter acres insufficient, but because of the shortage of land it
182 is now difficult, if not impossible, to obtain the ten or twelve
acre allotments provided for in the law, and there is no un-

132 The prevailing winds, which considerably temper the heat, are the
South-East Trade Winds. The ocean currents are also from the south-
133 east ; interesting proof is found in the fact that wreckage from the steamer
"Tahiti," which foundered about 500 miles south-east of Togatabu in
August, 1930, had drifted to the east coasts of Vava'u and the Ha'abai
islands by the following December.

132 Hurricanes are seldom experienced in Togatabu, but they some-
times occur in the northern islands where they work great havoc to plan-
731 tations and buildings. The most disastrous hurricanes of recent years
happened in 1912 and 1913 in Vava'u and Ha'abai. Niua Fo'ou was
ravaged by successive blows in December, 1930, February, 1931, and
March, 1932, and the hurricane of December, 1930, destroyed almost
every house in Niua Tobutabu.

731 Earthquakes are fairly common but are not severe, as a rule.
133 Instances of damage caused by tidal waves accompanying shakes are
recorded in some places such as Lifuka and 'Uiha, low islands of Ha'abai.

136

ANIMALS AND PLANTS.

231 Pigs, fowls and rats seem to have been brought to Tonga many
[439] centuries ago ; as already noticed, Tasman, Cook and other voyagers
exchanged iron goods for pigs and fowls. Hunting rats was a favourite
[175] sport of the chiefly archers in former times. Pigs and fowls still form the
[224] only meat-diet of the village-people. Their gardens are often spoiled by
[262] roving pigs ; and these creatures infest some uninhabited islands such
as Tofua, while the distant island of 'Ata swarms with fowls. Snakes
136 are unknown, but there are several varieties of lizard, including a green
lizard (fokai). There are numerous insect pests, such as centipedes and
mosquitoes.

231 Europeans have introduced horses, cows, goats, turkeys, etc.
[175] Cook presented the first horses, cows and sheep to Bau, Maealiuaki and
Finau in 1777 ; the cattle were called Cook's "pigs" (buaka Tute) by the
[177] natives, a circumstance which has given rise to the fiction that Cook
brought pigs to Tonga. These islands are not very suitable for sheep.

Government statistics show the following animals in Tonga in 1931 :—7,467 horses, 1,661 cattle, 7 sheep, 18,231 pigs, 4,028 dogs, and 2,148 goats.

136 In 'Eua there is a green parrot which will not breed if taken else-
where. Probably the strangest bird in the group is the megapodius
(malau) at Niua Fo'ou which flies badly and leaves unusually large eggs
to be hatched in the sand ; this bird is also found in the Solomon Islands
[237] but nowhere between that group and Niua Fo'ou. The tavake is a bird
whose blood-red tail-feathers were worn only by chiefs. As previously
[566] stated, the absence of running water accounts for the rather small number
of birds in the group.

Reference has already been made to the large number of flying-foxes which find sanctuary at Kolovai, in Western Togatabu.

The sea everywhere abounds in fish, and sharks are plentiful.
226 The people are expert fishermen, but of all their methods none is stranger

than the way in which they noose sharks ; instances of sharks attacking 226
natives are very rare. Whales are sometimes caught. Turtles are also 225
plentiful. Perhaps the most interesting creature in Tonga is a land-
tortoise, now kept in the Palace grounds at Nuku'alofa, and reputed to 231
have been left by Captain Cook ; it has been scarred by bush-fires and 825
other accidents, but in its old age it is honoured as though it were a chief
and is called Tu'imalila, after a part of Labaha called Malila. 552

The graceful coconut-palm is the most distinctive as well as the 245
most valuable of plants in Tonga. All parts of the islands being very
close to the sea, coconut trees thrive everywhere, and copra, the dried
kernel of the nut, is the staple product. Other plants which grow in 241
profusion are many varieties of banana, plantain, yam, sweet potato,
talo, manioc, sugar-cane, pineapple, breadfruit, papaw-apple, mango and
arrowroot. Coffee, cocoa and cotton have been introduced but are not
yet extensively grown. Various European vegetables have also been
introduced, and corn has proved the best cereal for this climate.

Bananas, sweet potatoes, pineapples, tomatoes, pumpkins and 439
oranges could be exported in abundance, if markets were available. The
staple foodstuffs of the people are yam, sweet potato, talo, manioc, kabe, 262
plantain, breadfruit, etc.

The bark of the paper-bark mulberry is extensively used for making 824
native cloth (taba and gatu), and the sap of the koka tree is used for [287]
stamping this cloth. Mats are made from the leaves of the pandanus,
but unfortunately this domestic manufacture is declining generally, [285]
except in Ha'abai. The trunks of the toa (ironwood) and koka are used [178]
for the posts of native buildings, but timber generally suitable for building
European houses is not found in Tonga. The ironwood or casuarina [313]
tree was used for making clubs and spears formerly, and is still used for
spade handles and mallets. The best of the old canoes were brought 505
from Fiji, where more suitable timber for all purposes is available. 439

Kava, the juice of a species of pepper-plant, is the national drink
on all occasions. Other interesting trees are the ovava, a species of 276
banyan ; gatae and tuitui (candle-nut) used for marking boundaries ;
Malayan apple or fekika, tava, and the ifi, whose leaves were hung round 137
the neck in token of surrender or penitence in olden times. 824

Government statistics in 1931 show a total of 2,658,644 coconut
trees and 832,655 banana plants in the Kingdom, 94% being owned by 245
Tongan cultivators.

EXPORTS.

Tonga is entirely an agricultural country, being without minerals 433
and secondary industries. It is unfortunate that there are still fairly
considerable areas of undeveloped land even in such a small country, 433
especially in Togatabu and 'Eua, and further that several hundred tax-
payers have no allotments ; this latter condition is mainly due to indolence 311
on the part of some who live in the chief towns, but in the case of the
overcrowded islands of Ha'abai it rises from rather a natural reluctance
to leave an old home. The Government is now making strenuous efforts 179
to enforce both more systematic cultivation of coconut-growing land and 245

179

245 [563] better methods of producing copra. The European planters are few, and the improvement of agriculture rightly lies with the Tongans themselves.

439 [245 [651] Copra, the chief product, is exported to England and America. Until better drying arrangements are more generally made, Tongan copra will continue to be regarded as of inferior quality; at present it is used largely in the manufacture of common soap and margarine. The Government levies an export duty of £1 per ton on copra. The quantity and value of copra exported in recent years are as follows:—

	Tons.	Value.
		£
1923	14,339	257,586
1924	14,533	297,487
1925	13,758	280,386
1926	13,992	255,156
1927	11,252	225,344
1928	15,671	282,344
1929	16,860	252,911
1930	14,134	169,609
1931	8,929	80,361

[458] The effect of the present world-wide trade-depression is apparent.

The export of bananas to New Zealand, through the Tonga Government, began in December, 1931. Since that date shipments varying from 3,000 to 9,000 cases have been sent, but the quantity has had to be restricted owing to the unfavourable ruling prices on the Auckland market. Sweet potatoes and pineapples have also been exported to Auckland in small quantities.

The only other article exported is edible fungus found on trees (taligeliga); this is sent to China, the average annual value in recent years being £530.

IMPORTS, WITH COUNTRIES OF ORIGIN.

The following are the total imports in recent years, together with total exports for purposes of comparison:—

	Imports.	Exports.
	£	£
1923	195,020	267,619
1924	232,600	306,658
1925	258,322	290,115
1926	227,882	263,198
1927	157,783	235,391
1928	211,907	287,668
1929	198,078	259,090
1930	148,305	183,204
1931	81,170	90,596

The chief imports, with their average total value in recent years, are: Drapery £28,170; meats (mostly tinned) £20,362; flour £10,894; bags (copra sacks) £7,401; hardware £6,419; motor cars and accessories

£4,556; timber £4,430; sugar £4,208; benzine £4,082; kerosene £3,310; 439 galvanized iron and manufactures £3,043; biscuits £2,841; machinery £1,747; rope £1,230.

The chief country from which goods are imported is New Zealand. Its proximity and the steamer communication give New Zealand an advantage over Australia, whose trade with Tonga has slightly fallen off. Trade with Japan is increasing, as a result of the operations of a Japanese firm. The bulk of the trade, however, is still in the hands of British firms.

The chief countries of origin, with imports and their average total value for the last eight years, are these:—

New Zealand (£67,543): Tinned meat, drapery, sugar (Fiji sugar refined in New Zealand), butter, furniture, timber, spades, rope, shoes, soap, carts.

Australia (£51,286): Drapery, flour, biscuits, harness, shoes, furniture, galvanized iron, bacon, jam.

Great Britain (£28,657): Hardware (tools, knives, etc.), machinery, galvanized iron, cement, motor cars, drapery, bags, matches, bicycles.

United States of America (£13,946): Benzine, kerosene, timber, motor cars, axes, salmon, typewriters, salt, torches, musical instruments, rifles, cameras, lamps, sewing machines.

Japan (£2,452): Silk, matches, toys.

Fiji: Sugar, biscuits.

Canada: Motor cars, salmon.

Germany: Pianos, lamps, toys, watches.

France: Perfumes, soap, sardines.

Sweden: Matches, enamel ware.

COMMUNICATIONS.

Although the first steamer to cross the Pacific, the American ship 648 "Monumental City," actually called at Togatabu, and it was hoped that 505 at least Vava'u harbour might be included in the regular trans-oceanic route, the subsequent development of Fiji has acted to Tonga's detriment, and to-day Tonga is in the backwater of steamer-communication. Until the early months of 1932 a passenger steamer of the Union S. S. Co. of New Zealand sailed monthly from Auckland to Fiji, and called at the three Tongan ports and Apia, Samoa, before returning to Suva and Auckland. Owing to trade-depression these sailings have ceased, and at present Tonga is served only by a monthly fruit-steamer and cargo-boat. Because of the danger of the rhinoceros beetle entering from Samoa, [136] direct communication from that group was forbidden until this year (1932).

Occasionally, other steamers (chiefly British, Norwegian and American) call to load copra and to discharge cargoes of timber, benzine, kerosene, etc. [439]

Inter-island communication is provided by the Government motor-vessel "Hifofua" and by numerous cutters. The distance from Nuku'alofa to Lifuka is 99 miles, and to Vava'u 169 miles: from Vava'u to Niua Fo'ou is 211 miles, and to Niua Tobutabu 167 miles. 505 [655]

House, the Ministers, nobles, and representatives, sits at a separate table. 646
Parliament receives the reports from the Departments, and deals with the ordinances passed by the Privy Council and with the Estimates that have been prepared by the Privy Council and revised by the Consul. Petitions may be presented through members, who may also propose motions themselves.

THE CONSUL (whose full title is His Britannic Majesty's Agent 648
and Consul) has considerable influence and important powers, derived
from the Treaty of Friendship and Protection 1901 and the Supplementary 645
Agreement 1905. By these he can veto expenditure, and he must approve the appointment of all Europeans in the Tonga Government. He advises on all external affairs, and also on internal matters if asked to do so by the Government. The Consul is, therefore, an officer of the British Government who carries out the terms of the Treaty guaranteeing both the peace and financial stability of Tonga.

THE PREMIER is the head of the Tonga Government and ad- 645
ministers these departments :—Foreign affairs, education, the medical
department, public works, agriculture, the printing office, the Govern- 647
ment vessels, telegraphs and telephones. He also controls the district
officers, whose duties include the preparation of the census, the reading [634]
of gazettes and laws to the people, and especially the supervision of
agriculture. Among those assisting the Premier are the Chief Medical 647
Officer, the Director of Education, the Director of Agriculture, and the Superintendent of Works.

The Medical Department provides free medical and dental atten- 744
tion for all Tongans, dispensers being stationed throughout the group
and European Medical Officers at the three centres. It also inspects 647
latrines, cement tanks, etc., in the interests of public health. The Medical Officers inspect all vessels entering ports from overseas, and a quarantine station is provided in case infectious diseases are found on such vessels.

THE MINISTER OF LANDS controls the Lands and Survey 423
Departments. Every male Tongan-born subject on reaching the age
of sixteen is entitled to a tax-allotment of 8¼ acres ; applications from 645
such, and also from Europeans and others wishing to lease land, have to be made to the Minister of Lands. Land cannot be sold to anyone.

THE MINISTER OF POLICE is responsible for the Police, Gaols 645
and Traffic Departments. [625]

THE CHIEF JUSTICE, in addition to his judicial functions, [693]
registers births, deaths and marriages.

THE TREASURER is responsible for the collection of taxes and the expenditure of public money, and is Controller of Customs and the Post Office. He also has charge of the Savings Bank.

There is no national debt, but the Government has placed invest- 652
ments totalling (in 1931) £141,686 in fixed deposits at Auckland and
Sydney, and in British and Colonial Government Stock. 457

The chief tax is the poll-tax of 36/- per annum on all Tongan males
sixteen years and upwards. The Customs (Import) Duty is 12½% ad 651
valorem on most articles (25% on some goods such as jewellery and fire- [439]
arms ; books, free).

127 The land tenure system was studied using land
registers and survey maps with the help of the staff of
121 the Land and Survey Department, Nuku'alofa. The aim was
to gather precise data on the total number and area of
the different types of land holdings, which could in turn
be used as a sampling frame for statistical surveys.

127 Statistical data on the export of copra, bananas, and
other produce were gathered from records available at the
121 Tonga Copra and Tonga Produce Boards. These data were
439 important to the study because a large percentage of the
produce exported through these Boards originates from the
small landholders' bush allotments.

125 A year-long study of Talamahu Market in the capital
443 city of Nuku'alofa was carried out. Talamahu Market is
the only permanent market place in the Kingdom which serves
125 as an outlet for local produce. Throughout 1971 and the
beginning of 1972, the market was visited at least once a
week to determine the seasonality and types and quantities
of produce that were available.

125 On Saturday, January 22, 1972 from 6:00 A.M. to
114 10:00 P.M., seven senior high school students helped make
a complete inventory of the amount, origin, destination,
and means of transportation of all available commodities
for a single day.

127 Black-and-white aerial photography (at a scale of
128 1:20,000), flown in August 1968 for the British Directorate

137 simplicifolium, Alyxia stellata and Dryopteris invisa. Lianas and epiphytes include Entada phaseoloides and Asplenium nidus. A fungus, Auricularia polytricha, is also found growing on dead logs during rainy spells. In the more open and cutover sites, the exotics Lantana camara and Psidium guajava plus Passiflora maliformis, Dioscorea bulbifera, Digitaria pruriens, and Paspalum conjugatum are among the dominant understory species and often form dense thickets.

311 Regardless of the species composition, these remaining stands of tropical lowland forest represent probably
the best potential agricultural land on Tongatapu with
[241] respect to soil fertility. These areas have either never
been cultivated or have been under fallow for sufficient
time to allow for considerable replenishment of organic
[313] material and plant nutrients. Furthermore, these stands
are valuable sources of timber, firewood, and traditional
[439] medicines. The dried fungus is exported to Hong Kong.

Plant Species Important in Cropland and Secondary Vegetation

311 The cropland and secondary vegetation, which comprise
241 over 90 percent of the total land area of Tongatapu, are
137 characterized by a succession of gardens and fallow areas
128 in various stages of regrowth. A detailed description of
241 this vegetation, which is comprised largely of introduced
137 species, constitutes much of the core of this dissertation.

128 The individual species are discussed in this section.

241 137 128 A great diversity of introduced species are commonly found in cropping sequences and secondary vegetation associations on the island. The groups of plants that will be discussed include: important staple and commercial crops; supplementary food plants; important non-food plants; important tree species; and common weed and secondary vegetation species. A comprehensive listing of these plant species and their uses is found in Appendix E. A

241 Important Staple and Commercial Crops

Staple food plants and commercial crops are the most important crops on bush allotments in terms of total acreage and include the following species:

244 [439] The greater yam - 'ufi (Dioscorea alata). The greater yam is traditionally the most prestigious of Tongan subsistence crops as well as being a minor export crop. Its center of origin is believed to be tropical Southeast Asia (Herklots, 1972: 418). It is known only in cultivation and was introduced prior to European contact. Numerous kinds of yams are recognized by Tongans; Whitecomb (1930: 19-20) listed 114 different kinds. The major kinds now cultivated are the kahokaho (which is considered the best and most prestigious), kaumeile, maho'a'a, kulo, kivi, takulevu, voli, and tamuni. Yams are generally planted from May through December, take six months to one year to mature depending on the variety or desired size, and are

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A [See Category 137, pp. 377-431--Analyst.]

244 or October, takes approximately 14 months to mature, and is harvested from August or September through November or December. Planting material consists of young shoots or cuttings from the edible stem; these are planted in holes and covered with soil.

Taro or swamp taro - talo Tonga (Colocasia esculenta). The swamp taro, a traditional staple crop which was formerly more extensively cultivated, is being replaced to a great extent by American or dryland taro varieties introduced after European contact. [439] It is, however, still a more prestigious and preferred crop than the dryland varieties and is exported in limited qualities. It probably originated in North India (Herklots, 1972: 404) and was a pre-European contact introduction into Tonga. A number of varieties of swamp taro are recognized by Tongans although most are generally referred to as talo Tonga (Tongan taro). Swamp taro can be planted throughout the year; the optimum time, however, is during the rainy season from December through March. It takes from 9 to 18 months to mature and can be harvested at any time during the year. Planting material consists of the leaf-bearing section from the top of the tuber, which is placed in holes and covered with soil.

American taro, dryland taro, tannia, yautia or coco yam-talo Futuna or talo kula (Xanthosoma violaceum). This aroid of tropical American origin, was probably introduced

245 suckers and pieces of the rhizome or corm from the base of mature plants, which are transplanted to suitable areas.

[439] Banana - siaine (Musa sapientum). The series of clones known as bananas are a major export crop as well as constituting an increasingly important staple food. They are widespread throughout Tongatapu, generally planted in plantations. Like the plantain, they are native to Southeast Asia, and although some types were probably present before European contact, they have been replaced in most cases by new higher yielding and more exportable clones (Massal and Barrau, 1956: 15-16). A number of kinds of bananas are recognized by Tongans, the most common groups of clones being the siaine Ha'amoa (Samoan banana) or Mons Marie; the siaine Tonga (Tongan banana) or Cavendish; the siaine Fisi (Fijian banana) or Gros Michel (Johansson, d. 1956: 3); and the pata and mamae. The planting times, time of maturation, period of optimum yield and the types of planting material are the same as for the plantain.

The coconut palm - niu (Cocos nucifera). The coconut palm, which seems to be native to tropical Asia, was either introduced by the early inhabitants of Tongatapu or arrived [262] there by natural dispersal (Baker, 1970: 48-49). It is the most common tree crop found on Tongatapu, the most important commercial crop, and provides the coconut which is used in the preparation of almost all staple food. Countless other uses are made of all parts of the tree. It

245 is found on almost all bush allotments, planted either in systematic rows or in a random fashion, in varying numbers on most town allotments, as well as growing naturally along the coast. Numerous kinds of coconuts are known to Tongans, the most common varieties being niu kafa, niu mea, niu matakula, niu ui, niu'utongau, niu mea'alava, niu leka and niu ta'okave. 245 Very little scientific selection of high 242 yielding varieties is practiced, the planting material in most cases consisting of suitable fallen nuts. With the establishment of the Coconut Replanting Scheme, however, new varieties from Sri Lanka were introduced and nurseries were established to improve selection of local planting 245 material. Coconut palms are planted throughout the year, take from seven to ten years to come into bearing, and bear fruit through out the year.

244 Watermelon - meleni (Citrullus vulgaris). The watermelon, which is native to the Kalahari Desert of Southwest Africa (Herklots, 1972: 314), was possibly first introduced into Tonga by Captain Cook on his second voyage [438] (Beaglehole, 1969: 262). It is Tonga's third most import- [439] ant export crop, is a major item at the local market, and is grown on bush allotments throughout Tongatapu on a commercial basis. There are two kinds of watermelon commonly grown, the "Ice Cream" and "Market Wonder," both [439] of which are referred to as meleni by Tongans, Although the "Ice Cream" is sweeter, the "Market Wonder" ships

244 better and is favored for export (Johansson, c. 1956: 3).
[439] Although melons are planted throughout the year, the best
planting time is from May to August during the drier part
of the year. At this time, there is a lower incidence of
fungal diseases and other pests and the melons tend to be
sweeter. Watermelons take about three to four months to
mature with the largest harvests occurring from August
[438] through December. Planting material consists of seeds
purchased either through stores in Nuku'alofa or from the
Produce Board.

245 Pineapple - fainā (Ananas comosus). The pineapple is
of tropical American origin (Prevost and Pitkanen, 1970:58),
and was an early European introduction, probably by Cook on
[438] his second voyage in 1773 (Beaglehole, 1969: 262). It is
[439] grown in large patches throughout Tongatapu for export and
local sale, as well as being intercropped with other crops
on both bush and town allotments. The two most common
varieties are the "Rough" and the "Ripley Queen", known
locally as fainā Tonga (Tongan pineapple) and the piu
respectively. The Ripley Queen is favored for export owing
[439] to its larger size (Johansson, c. 1956: 3). The optimum
planting season for pineapple seems to be from September
through December; the plants begin to bear in about 14
months and are most abundant from September through January.
[242] Some farmers have been producing crops throughout the year
by treating the plants with a hormone. Planting material

245 consists of suckers from mature plants or the leaf-bearing
portion of the fruit.

244 Peanuts or groundnuts - pinati (Arachis hypogaea). The
peanut, which is thought to be native to South America
(Baker, 1970: 56), is a post-European introduction (Massal
[438] and Barrau, 1956: 30). It has been grown in Tonga for a
[439] number of years and, although a concerted attempt was made
after World War II and in the early 1960's to establish it
as an important export crop, it is now grown primarily
for local sale by street vendors in Nuku'alofa. There are
two main varieties recognized by Tongans, the foua or two-
seeded variety and fo tolu or three-seeded variety.
Although no reliable data on planting and harvesting dates
could be obtained, it seems that there are two different
planting times for peanuts, September and January; the
plants take three to four months to bear depending on the
variety and are reportedly harvested in January and May.

Tomato - temata (Lycopersicon esculentum). The tomato,
native to western Peru and Ecuador, is a comparatively
[439] recent European introduction (Herklots, 1972: 360-161). In
1971, it was Tonga's number four export crop after coconuts
(and coconut products), bananas, and watermelons respect-
ively. It is becoming an increasingly common addition to
the cropping complexes on bush allotments throughout
[438] Tongatapu. It is also a major item at the market in
Nuku'alofa and is often grown for home use, along with

244 [438] other garden vegetables, in small plots on both bush and town allotments. Medium sized red tomatoes are most common, although the smaller cherry tomato is also found, often growing wild in ruderal places. Tomatoes and most other garden vegetables are planted beginning in April or May (following the hot, rainy season) and are harvested starting in May through November or December. Some farmers, however, have been able to grow them for local sale on a year-[438] round basis. Seeds are generally purchased from the large trading stores in Nuku'alofa or from the Produce Board.

Bell pepper or capsicum - *polo* or *polo palangi* (*Capsicum annuum*). Bell pepper is a post - European introduction from tropical America (Herklots, 1972: 350). [439] Like the tomato, it is rapidly becoming an important [438] commercial crop for export and for local sale and an increasingly common addition to the crops grown on bush allotments. Planting and harvesting times, acquisition of planting material, etc. are the same as for the tomato.

[439] Other introduced Vegetables. There are a number of [438] other vegetables, most of comparatively recent introduction, which, although of minor importance, have been exported from time to time to New Zealand, Fiji, or Samoa and are currently sold locally at Talamahu Market. These vegetables include: green beans - *pini* (*Phaseolus vulgaris*), native to Central America; European cabbage - *kapisi* (*Brassica oleracea var. capitata*), carrots - *kaloti* (*Daucus carota*)

244 and beets - *pitiluti* (*Beta vulgaris*), all native to
Europe or the Mediterranean; lettuce - *letisi* (*Lactuca
sativa*) and bulb onions - *onioni Palangi* (*Allium cepa*), both
native to the Middle East; cucumbers - *kiukamipa* (*Cucumis
sativus*) and eggplant - *paigani* (*Solanum melongena*), both
native to India; Chinese cabbage - *kapisi Siaina* (*Brassica
chinensis* and B. *pekingensis*), native to China; and
radishes - *latisi* (*Raphanus sativus*), native to Europe and
Asia (Herklots, 1972). Most of these are grown infrequently,
and are generally in season at the same time as
[438] tomatoes and bell peppers. The seeds are purchased
primarily from large trading stores.

245 Vanilla - *vanila* (*Vanilla planifolia*). Native to
Mexico (Macmillan, 1956: 330), vanilla has been successfully
[439] introduced into Vava'u where it has now become an important
export crop. Within the past few years, a small number of
Tongatapu farmers have also planted vanilla on their bush
and town allotments. It is generally planted using the
physic nut or *fiki* (*Jatropha curcas*) to climb on. As of
yet, it is of little or no economic importance on Tongatapu.

241 *Supplementary Food Plants*

In addition to staple food plants and commercial crops,
there are a considerable number of supplementary, non-arborescent
food plants commonly grown on bush and town
000 allotments throughout Tongatapu. These crops include:

243 **Corn or maize - koane (Zea mays). Corn or maize, a native of Mexico (Herklots, 1972: 384), was introduced after European contact (Massal and Barrau, 1956: 44).** [439] [438] **Although being exported on a limited basis, it is primarily a subsistence crop as well as being sold at the local market. It is found on many bush and town allotments throughout Tongatapu, planted either alone or intercropped with yams, taro and other subsistence crops.**

245 **Edible hibiscus - pele (Hibiscus manihot). Pele, probably native to the Southwest Pacific (Massal and Barrau, 1956: 35) is a form of edible hibiscus, growing** [262] [252] **about three to five feet in height. It is an important green vegetable source (the leaves being cooked like spinach with or without coconut cream), is easily cultivated, and is commonly found throughout Tongatapu on both bush and town allotments. Two kinds, pele hina and pele kula, are commonly recognized by Tongans, the former being the more common.**

Papaya or pawpaw - lesi (Carica papaya). Of tropical American origin and post-European introduction (Barrau, 1971: 5), the papaya is a ubiquitous plant which provides the most common fruit on Tongatapu. It grows on almost all bush and town allotments in both wild and cultivated states and is a dominant species in many secondary vegetation communities. There are a number of varieties recognized by Tongans, the most common being lesi Tonga, lesi meleni and lesi 'Initia.

000 and lesi 'Initia.

249 Sugar cane - to (Saccharum officinarum). The sugar cane, believed to be of New Guinea origin, was present in Tonga before European contact (Barrau 1971: 18). It is exported in small quantities, but is primarily a traditional subsistence crop grown on both bush and town allotments. The most common varieties recognized locally are au, to hina, to kula, and heleveka.

[439]

Kava (Piper methysticum). Kava, a traditional pre-European plant, is probably a native of the western Pacific. The roots and branches are made into the traditional Tongan social beverage of the same name. The plants, which take more than two years to mature and improve with age, are found on many bush and town allotments.

244 Green onion or shallot - onioni Tonga (Allium ascalonicum). The green onion is native to the Northern Hemisphere, possibly Eurasia (Herklots, 1972: 387), and is probably a post-European contact introduction. It is common at the local market and is grown on many bush and town allotments throughout Tongatapu, either alone in vegetable gardens or intercropped with other subsistence plants.

[438]

Pumpkin - hina (Cucurbita pepo) - The pumpkin, of American origin, was reputedly introduced by Captain Cook. It is grown on many allotments, generally intercropped with other crops as well as growing wild in a somewhat

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the effect of the invertebrate fauna on the agricultural system is probably of greater significance.

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Two of the most destructive pests are the rhinoceros beetle (Oryctes rhinoceros) and the coconut stick insect (Graeffea crouani), which have been responsible for substantial losses in coconut production. The rhinoceros beetle, which was first discovered on Tongatapu in December, 1961, possibly carried by man from Vava'u, has been the object of extensive, although as yet unsuccessful, control programs. The coconut palm is also affected by other insects including the coconut flat moth (Agonoxena spp), and the coconut leaf miner (Promecotheca spp.).

Considerable damage to bananas is caused by the banana scab moth (Nicoleia octasema), the banana rust thrips (Chaetanophothrips orchidii), the nematode (Rodopholus similis), fruit flies (Atherigona orientalis and Dacus faciatus), and indirectly by a species of aphid (Pentalonia nigronervosa) which is responsible for the spread of bunchy-toptop virus (O'Connor, 1969).
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241
[439]
Fruit flies are also a problem in production of tomatoes and bell peppers, and have made Tongan citrus fruit unacceptable for the New Zealand market (Johansson, 1971: personal communication). Other invertebrates, such as leaf miners, moths, spider mites, and weevils, also cause damage to crops throughout Tongatapu.

175 and friendship" (Sharp, 1968:56). When Cook arrived in
721 Tongatapu, although some weapons were observed, "the people
181 went about unarmed and seemed very peaceful"(Wood, 1945:19).

174 Tongans maintained a tradition, probably dating from
648 the time of first settlement, of voyaging to Fiji and Samoa
and possibly to the Tokelaus, Rotuma, and the Ellice Islands.
The Tongans were reputedly the main voyagers in the Fiji-
Tonga-Samoa area and maintained especially close ties with
174 the warlike Fijians to the east (Sharp, 1964:27-29). At
439 first these ties involved the bartering of Tongan goods,
such as whale's teeth, the tail of the sting ray (used for
pointing spears), tapa cloth, sail mats, and inlaid clubs
for Fijian goods, such as hardwood for building canoes, bowls,
pottery, red parakeet feathers (which were exchanged in Samoa
where they were used in decorating fine mats), and sandal-
wood (Thompson, 1940:29; Derrick, 1946:30 and Latukefu, 1967:
175 59-60). In the latter half of the nineteenth century,[A] how-
648 ever, Tongans began taking part in Fijian wars, helping cer-
721 tain chiefs who rewarded them with the superior Fijian canoes
175 and weapons. These latter visits had "most evil effects on
721 Tonga" and probably played a great part in bringing to a
669 close the long period of peace and provided the impetus for
the brief period of civil disorder or "Dark Ages" that was to
follow (Wood, 1945:25).

Although an atmosphere of peace lasted through Cook's
last visit in 1777 and d'Entrecasteaux and Labillardiere's

[A] [Author undoubtedly means the eighteenth century--Analyst.]

177 convicts also increased the Tongans' knowledge of the
European culture. These visitors searching for whales,
sandalwood, turtle shell, bêche-de-mer, cheap labor, and
adventure, introduced new diseases, alcohol, and firearms.

177 The impact of missionary societies effectively began in
797 1826 and was dominated by the Methodist or Wesleyan Mission
[795] although Catholic, Anglican, Seventh Day Adventist and,
more recently, the Morman missions have also had consider-
[241] able influence. Tongans have been nominally converted to
Christianity; an education system was founded; there has
been considerable missionary influence politically; and new
agricultural technology such as sprinkler irrigation and new
varieties of peanuts, bananas, garden vegetables, and other
crops have been introduced through missionary societies.

177 During the latter half of the nineteenth century, resi-
439 dent traders and large trading concerns, such as J.C.
Godeffroy and Son, came to Tonga for such products as coco-
177 nut oil and bêche-de-mer (Robson, 1946:63). European
241 settlers and trading companies, such as the successor to
439 Godeffroy and Son, the D.H.P.G. (Deutsche, Handels-und
Plantagen-Gesellschaft der Sudsee-Inseln zu Hamburg),
[423] obtained leasehold rights to land and developed plantation
agriculture around copra, cotton, coffee, and livestock. A
number of these large-scale plantations still exist, and
European technology and the cultivation of export crops have
remained an integral part of Tongan agriculture.

463 around their own households, including preparation of
462 agricultural crops and handicrafts, and working in dooryard
162 gardens or on the bush allotments.

463 A high percentage of Tongan males employed in agri-
culture is also shown by the survey of households conducted
by the author in 1971 (Table 17). These data show a
majority were full-time farmers and that another 15 percent
had some other employment, such as a village storekeeper,
part-time banana inspectors/or a lay preachers, but still
considered themselves primarily farmers. Out of 149 house-
holds, there were 39 households with more than one full-
time farmer (one household with five; two with four; eight
[461] with three; and 28 with two). Of the 36 heads of house-
holds who considered themselves full-time wage workers, 58
percent put in some time, ranging from 1 1/2 to 16 hours
per week farming on their allotments. Of these 36 full-
time wage earners, five did not own allotments.

262 **Subsistence Needs**

241 The Tongan diet continues to be largely dependent on
staple and subsidiary crops grown on traditional garden
262 allotments. In a listing of the relative importance of
439 items in the diet (Table 18), only a few imported items
128 such as bread (made from imported ingredients), mutton,
[263] and canned fish rank high on the list. Imported luxury items
used more for flavor than nutrition, such as canned fruits,
gelatin desserts, ice cream, sugar, salt, and canned or
dried milk, are not listed.

000 dried milk, are not listed. Furthermore, despite increasing
241 imports of cosmetics, medicine, tea, coffee, soda pop,
439 alcoholic beverages, and tobacco products, the Tongan agricultural system continues to be the major source of traditional medicines, perfumes, oils, soap subsitutes, ingredients for beverages (including alcoholic "home brew" or *hopi* and the traditional social beverage *kava*), as well as being a source of tobacco, vegetable dyes, fish poisons, and other miscellaneous necessities (see Appendix F).A

463 Table 17. Occupations of heads of households for sample households on Tongatapu.

	Outside Nuku'alofa		In Nuku'alofa		Tongatapu	
	No.	%	No.	%	No.	%
Full-time Farmer	64	61	15	34	79	53
Part-time Farmer	17	16	5	11	22	15
Full-time Wage Worker	13	12	23	52	36	24
Unemployed	11	11	1	2	12	8
TOTAL (Sample)	105	100	44	100	149	100

A[Author probably means Appendix E; see Category 137, pp. 377-431--Analyst.]

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Table 18. Relative importance of foodstuffs, based on number of days per year on which a given product is consumed. (Averages of a random sample of 25 households).

I = Imported from overseas, P = Partially imported.

Item	Days/Year	Item	Days/Year
Coconut	343.3	Green onions	66.6
Manioc	340.2	Sugar cane	66.0
Bread(I-ingredients)	257.8	Green plantain	63.3
Taro leaves	233.7	Ripe bananas	54.6
Green bananas	223.7	Tomatoes	51.2
Taro Futuna	211.0	Butter (I)	47.2
Taro tea	179.2	Corn	46.4
Edible Hibiscus	152.5	Watermelon	45.5
Mutton (I)	143.0	Manioc bread	43.8
Flour (I)	114.3	Sea weed	42.9
Papaya	104.3	Eggs	35.9
Canned fish (I)	100.3	Pineapple	34.5
Fresh fish	100.0	Chicken	33.4
Sweet potato	98.5	Canned corned beef	31.8
Onions (P)	94.3	Tahitian chestnut	29.0
Giant taro	77.0	Cabbage	24.2
Breadfruit	75.2	Pork (P)	23.2
Yams	73.3	Beef (P)	23.0
Shellfish	67.0	Beans	20.8

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Item	Days/Year	Item	Days/Year
Carrots	16.7	Cucumber	3.6
Pumpkin	16.0	Dog	2.8
Green _pata_ banana	13.5	_Sonchus oleraceus_ leaves	2.7
Goa yam	13.4	_Ochrosia oppositifolia_ fruit	2.4
Bell pepper	13.4	Duck	2.2
Lettuce	13.3	Goat	2.0
Solanum nigrum leaves	12.2	Ripe plantain	1.4
Ripe plantain	11.2	Sweet potato leaves	1.1
Swamp taro	8.6	_Cordyline terminalis_ tuber	0.8
Chinese cabbage	6.5	_Misapeka_ banana	0.8
Horsemeat	6.1	Cat	0.3
Ripe _mamae_ banana	6.0	Pandanus fruit	0.3
Sausage (I)	5.6	Polynesian arrowroot	0.2
		Manioc leaves	0.2

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[439]

Except for ceremonial occasions, European dress and imported material have replaced the tapa cloth worn prior to European contact. However, the traditional _ta'ovala_, a woven or plaited mat-like garment which is tied around the waist by a cord, is still worn formally and informally by Tongan men and women.

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Table 20. Continued.

Other sources	5%	16%	9%
Total sample size	97	44	141

434 The great diversity of store goods which are now desired by the average Tongan family (Tables 21 and 22) emphasizes the growing need for cash. In addition, cash is needed for church, school fees, taxes,and to fulfill social obligations within the family, the village, and to nobles or even to the town officer in some cases.

439 [241]

Overseas Income

The primary source of Tongan overseas income is the agricultural system. During the period from 1967 to 1971, products of agricultural origin constituted 97 percent by value of all exports(Table 23). The remaining 3 percent included re-exported motor vehicles, empty containers such as oil drums and gas cylinders, goods under bond, and personal effects. {431 602} A small proportion of the total value of exports is made up of agricultural products sent by Tongans as gifts to relatives overseas, including yams, taro, bananas, watermelons, sugar cane, mangoes, kava, pineapples, and handicrafts. Such items fulfill social obligations and indirectly account for considerable income in the form of remittances from the (grateful) recipients of the goods.

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Table 21. Number of times specified items were listed as being commonly purchased at small village stores (based on 120 questionnaire responses).

Bread	90	Onions	8	Lard	3
Soap	84	Cocoa	7	Toilet Paper	3
Sugar	82	Jam	7	Face Powder	2
Kerosene	74	Canned Milk	6	Perfume	2
Salt	60	Candy	6	Baking Powder	2
Tinned Fish	57	Razor Blades	6	Watermelons	2
Flour	54	Tea	5	Buns	2
Matches	41	Hard Biscuits	5	Pepper	1
Tinned Beef	35	Thread	5	Coffee	1
Mutton Flaps	34	Starch	5	Needles	1
Cigarettes	31	Batteries	5	Aspirin	1
Bleach	20	Laundry Soap	5	Cheese	1
Butter	27	Soda pop	5	Soup	1
Curry Powder	20	Material	4		
Tobacco	14	White Gas	3		
School Supplies	12				

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[824]
[237]
The exported handicrafts and curios include plaited ware, tapa cloth, leis, necklaces, slippers, or skirts made primarily with local plant materials. A small proportion, however, consist of sea shells and other objects collected from the surrounding reefs.

434 Table 22. Continued.

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Table cloth	1	Fertilizer	1

439 The fungus, Auricularia polytricha, which is exported
137 to Hong Kong, is classified as an agricultural product by
824 the Tongan Government, and although most of it comes from
the island of 'Eua, some is still found during rainy periods
on dead logs in forested areas of bush allotments on
Tongatapu.

439 At present there is a concerted effort being made by
179 the Agricultural Department and the Tonga Commodity Boards
652 to diversify and increase agricultural exports in order to
179 stabilize the economy. These efforts have increased
241 production of garden vegetables, pineapples, watermelons,
439 root crops, and, more recently, vanilla. ~~Nevertheless,~~
245 the major export crops continue to be coconuts and bananas.

Unfortunately, the market for copra is highly unstable,
and both crops are susceptible to disease, pests, hurricanes,
[505] and periodic droughts. In the case of bananas, exports
depend on unreliable shipping services to New Zealand.
Nevertheless, coconuts and bananas are still the major
commercial crops found on the traditional bush allotment.
Consequently it is important to have some background on the
production of these crops.

Copra and Other Coconut Products

Prior to World War II independent traders throughout

[TEXT CONTINUED ON PAGE 156]

88: Thaman K-5 (1967-1973) 1978 OU9 Tonga OU9
Tongatapu
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Table 23. Type and Value (in $Tongan) of Tongan Exports, 1966 to 1971.

Articles	1967	1968	1969	1970	1971
Avocados					1.507
Bananas	1,612,458	1,738,679	683,640	465,956	368,970
Beans					166
Beetroot (chard)				50	
Cabbages				47	
Capsicum			14,058	18,127	24,374
Carrots				48	
Coconuts	13,473	14,134	14,798	36,774	18,342
Coconuts (desiccated)	319,213	378,766	309,448	521,289	314,349
Coir fibre	1,971	1,207	1,706	63	112
Copra	1,394,207	1,479,069	2,103,685	1,345,268	1,094,094
Corn (sweet)				177	
Cucumbers				745	2,954

88: Thaman K-5 (1967-1973) 1978 OU9 Tonga Tongatapu OU9

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Table 23 continued.

Articles	1967	1968	1969	1970	1971
Egg plant				745	2,288
Fruit juice	140	7			
Fruit, various	2,082	7,020	4,223	2,819	1,729
Fungus	33,897	24,509	17,972	32,253	8,326
Ginger					24
Ground food	8,316	14,503	17,054		
Taro and yams				22,080	24,493
Handicrafts and curios	16,081	15,434	32,374	28,408	34,224
Hides	77				55
Kava		95	511	110	20
Livestock	424	837	518	377	303
Lettuce				172	14
Mangoes					168

Table 23 continued.

Articles	1967	1968	1969	1970	1971
Marrows					4
Onions				26	
Papayas					247
Peanuts	440	89	809	340	550
Pineapples	2,699	2,151	3,621	2,740	4,726
Plantains			1,231	5,823	6,828
Potatoes	20				
Pumpkins				4	19
Rock melons					20
Strawberries				38	
Sugar cane	1				319
Tomatoes			55,611	36,799	174,164
Vanila beans		4,050	6,837	2,800	6,326

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88: Thaman K-5 (1967-1973) 1978 OU9 Tonga Tongatapu OU9

88: Thaman K-5 (1967-1973) 1978 OU9 Tonga OU9 Tongatapu

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Table 23 continued.

Articles	1967	1968	1969	1970	1971
Vegetables (misc)	8,712	29,416	796	459	
Watermelons	50,281	56,478	34,975	73,756	98,546
Total value Agricultural Exports	3,464,472	3,766,554	3,302,201	2,599,254	2,088,461
Total All Exports	3,566,321	3,846,335	3,398,684	2,676,382	2,200,232
% of Total Export	97	98	97	97	95

Sources: Government of Tonga Statements of Trade and Navagation for the Year(s) 1967 - 1971, Government Printer, Nuku'alofa.

439 Tonga purchased undried coconut kernel from individual
245 farmers and sold it, after drying at the main export center.
The traders were paid a per ton commission and consequently
worried about quantity rather than quality. Little care
was taken in drying the fresh coconut kernels, and soon
Tongan copra had the reputation of being the worst in the
South Seas (Tonga Copra Board, 1969b : 1). Consequently
Tongan copra was difficult to market and production
245 remained at a very low level. In 1942, a co-operative
439 marketing organization, the Tonga Copra Board, was estab-
655 lished and given sole right to export copra. Quality was
improved through rigid controls over drying, establishment
of a strict grading system at the time of purchase, and a
policy of trying to obtain the highest possible returns for
245 the individual producers. The industry received further
439 help from the British Ministry of Food which offered an
F.O.B. price and arranged shipping, which was very scarce
in the early days (Tonga Copra Board, 1969b: 2). The
quality of Tongan copra has improved considerably, and by
1947 the production of copra had reached over 14,000 tons
per year (Table 24). Production and value of Tongan copra
continued to increase until the mid-1950's. Since that time,
production has fluctuated with decreases owing to hurricanes,
drought, poor copra prices and the conversion of coconuts
into other products. Nevertheless, copra has continued to
be Tonga's number one export except during 1967 and 1968

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Table 24. Tonga and Tongatapu copra production and exports 1942-1970 (Tongatapu figures through 1966 include 'Eua production.

Year	Total Production (1000 Tons)		Total Export Products (1000 Tons)	Value to Producers ($T1000)	F.O.B. Value ($T1000)
	Tongatapu	Tonga	Tonga	Tonga	Tonga
1942	-	-	5	-	154
1943	2	8	7	203	267
1944	5	11	11	345	483
1945	5	10	8	336	374
1946	6	13	8	522	345
1947	7	15	15	865	1,396
1948	7	15	15	1,117	1,628
1949	7	15	14	1,348	1,628
1950	8	16	17	1,331	2,017
1951	9	17	19	1,669	2,542
1952	8	17	17	2,086	2,661
1953	8	15	13	1,730	2,048
1954	8	15	14	1,878	2,448
1955	9	21	21	2,400	3,501
1956	11	22	19	2,199	2,769
1957	11	22	27	2,042	3,739
1958	9	16	14	1,391	1,999

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Table 24 continued.

Year	Total Production (1000 Tons)		Total Export Products (1000 Tons)	Valueto Producers ($T1000)	F.O.B. Value ($T1000)
	Tongatapu	Tonga	Tonga	Tonga	Tonga
1959	8	16	16	2,088	3,116
1960	9	17	16	1,841	2,754
1961	11	16	17	1,231	2,239
1962	8	10	9	726	1,095
1963	8	11	10	1,004	1,355
1964	6	10	11	988	1,582
1965	5	9	7	1,116	1,131
1966	5	9	12	884	1,791
1967	5	11	11	1,105	1,662
1968	3	8	8	876	1,399
1969	5	12	-	1,079	-
1970	5	8	-	839	-

Sources: Tonga Copra Board, 1969b:5-6; Tonga Copra Board records.

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when bananas surpassed it. In 1969, copra regained its position as the leading export. At present, the bulk of Tongan copra is shipped to continental Europe; some shipments have gone to Japan, Colombia, and Venezuela (Tonga Copra Board records).

In addition to copra, there are a number of other coconut products which are exported commercially: desiccated [258] coconut, coir products, and whole nuts. Production of desiccated coconut (sliced and quick-dried) for overseas shipment commenced in 1963 at Haveluloto, just outside Nuku'alofa. As of 1971, all coconuts used in its production were obtained from Tongatapu growers who sold them to the Copra Board at permanent buying stations throughout Tongatapu. Desiccated coconut is a source of increasing income to Tonga and its farmers (Table 25). It is generally exported to New Zealand, Australia, the United Kingdom, or Fiji. In 1965, the Copra Board began exporting whole coconuts to Australia and New Zealand. The quantity is small, however, compared to that used for desiccated coconut.

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In 1963, the Copra Board started a coir fiber industry to utilize the leftover husks from the production of desiccated coconut. The major products were rope, twine, door mats, floor runners, and various types of brushes. [439] Unfortunately, exports proved unprofitable and the Board has continued only limited production for local consumption.

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Table 25. Bulk desiccated coconut production and exports 1963-1970.

Year	Production (Tons)	Exports (Tons)	Total F.O.B. Value $T1000
1963	402	402	91
1964	766	743	171
1965	933	884	245
1966	1036	922	259
1967	1099	1235	319
1968	1191	1059	379
1969	1283	1076	294
1970	1345	1538	459

Sources: Tonga Copra Board Records

245 Production of coconut oil was also attempted and proved unsuccessful.

Such attempts to expand coconut related industries encountered major obstacles. Increased copra production, for example, is discouraged by the instability of copra prices. The monthly price structure in Tonga is based on the average of Philippines' quotations made by the Spot Fixing Committee of the London Copra Association. Tonga has virtually no control over the price structure, which over the years has been very unstable. For example in December

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245 subsidies for adequate maintenance of the young trees, and
654 many new palms have been killed as a result of burning,
[244] competition by weeds, or trampling by horses or cattle. The
fertilizer is often diverted to other crops, such as watermelons or European vegetables. The palms generally are
poorly cared for and many allotments are not planted with
[262] sufficient palms to obtain maximum yields. Nevertheless,
the fact that most allotments do have mature coconut palms,
and some have replanted palms, reflects their importance
not only as a source of cash but also as a major staple
item in the Tongan diet.

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Bananas and Other Commercial Agricultural Exports

439 The other export crop, bananas, along with commercial
watermelons, pineapples, and garden vegetables, have also
become integral parts of the cropping sequences on bush
[655] allotments. In 1940, bananas, watermelons, pineapples, and
a number of other products were declared "commodities" under
the Agricultural Organization Act and have since been
marketed only through the Tonga Produce Board (Wylie, 1967:
1557-1563).

245 Bananas became an important export in the first decade
439 of the century. In 1908, over 100,000 cases were shipped to
New Zealand at a value of $T28,000. In 1909, however, New
Zealand trade restrictions caused a considerable decline in
the export of bananas. This decline lasted until 1931 when
a satisfactory trade agreement was reached (Naval Intelli-

245 gence Division, 1944:81). The banana industry has since
439 experienced numerous problems and there has been
considerable fluctuation in exports (Table 26). The drop in
245 production in 1963 was a result of cyclone damage, while the
731 drop in 1952 resulted from a combination of drought in late
132 1951 and high winds in January 1952 (Tonga Produce Board,
1953 and 1964:1).

245 In addition to climatic variables, the banana industry
439 has been susceptible to a great variety of problems,
[655] including shipping strikes, low prices to growers due to
excessive overhead costs of the Produce Board, restrictive
quota system, poor quality packing by growers, and, most
recently, disease, In 1951, as a result of waterfront
strike in New Zealand, no vessels arrived during March and
there was an estimated export loss of 20,000 to 30,000 cases
(Tonga Produce Board, 1952).

In 1961 and 1962, banana quotas were reduced by New
Zealand, owing to balance of payments problems (Maude, 1965:
150). Trial shipments were then made to Japan in an effort
to open new markets and in 1964 four shipments were
[655] consigned to Japan. In many cases, farmers accused the
Produce Board of favoritism in assigning quotas. In 1966,
owing to floods in the Fiji Islands and a hurricane in
Samoa, these two areas could not fulfill their New Zealand
quotas and Tonga was free to ship as many bananas as
possible. This eliminated the attractiveness of shipping to

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439 Japan and provided the stimulus for the great increase in production. During 1967 and 1968 bananas surpassed copra as the number one export and many Tongan farmers planted large portions of their bush allotments with bananas in order to share in the considerable profits that were being made.

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137 Unfortunately, in 1967 black-leaf-streak fungal disease (Mycosphaerella fijiensis) and bunchy-top virus led to a drastic reduction of banana production in Vava'u and Ha'apai, especially during the warmer months (Government of [242] Tonga, 1968a:4-5). By 1968, despite regular spraying programs conducted by the Department of Agriculture, bunchy top and black-leaf-streak broke out during the summer and [136] early fall on Tongatapu. Also a factor in the incipient decline in 1968 was a root nematode (Radopholus similis) [439] (Government of Tonga, 1969a:6). The black-leaf-streak was worse in 1969 and banana exports from Tongatapu dropped by 245 approximately 60 percent. Production again decreased in 1970 and 1971 and many farmers have become disenchanted and given up banana cultivation.

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654 In an attempt to combat declining banana production, the Tonga Produce Board, in co-operation with the Department [457] of Agriculture and subsidized by Fruit Distributors Ltd.of New Zealand (the firm which buys all of Tonga's present [439] banana exports), approved a Banana Rehabilitation Scheme in 1971. This required growers to plant one acre or more of at

[TEXT CONTINUED ON PAGE 167]

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Table 26. Banana exports from Tongatapu and the Kingdom of Tonga, 1951 to 1971.

	Tongatapu	Tonga	Tonga
	No. of Cases* (1000)	No. of Cases* (1000)	Value ($T1000)
1951	65	74	137
1952	22	29	55
1953	76	86	160
1954	87	115	233
1955	104	133	285
1956	154	184	384
1957	152	158	372
1958	69	70	172
1959	157	171	429
1960	171	183	456
1961	114	119	294
1962	121	153	383
1963	68	93	227
1964	114	147	371
1965	248	315	994
1966	361	455	1,342
1967	507	607	1,797
1968	475	536	1,735

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Table 26 continued.

	Tongatapu	Tonga	Tonga
	No. of Cases* (1000)	No. of Cases* (1000)	Value ($T1000)
1969	191	209	680
1970	121	143	464
1971	81	118	358

*The size and dimension of banana cases have changed a number of times between 1951 and 1971.

Source: Tonga Produce Board Records.

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[136]

least 500 plants with no intercropping, to control weeds to a reasonable standard, to practice desuckering and leaf-trimming, and to destroy bunchy-top affected plants. The Agriculture Department's responsibilities were to apply fertilizer at a rate of two pounds per plant per annum, to spray to control black-leaf-streak, to supply two percent DDT powder for control of the banana scab moth (Nacoleia octasema), and to keep a register of approved growers (Government of Tonga, 1972b:5-6). Despite these strong measures, in late 1971 most farmers were still reluctant to plant bananas and very few bush allotments had healthy banana plantations.

245 banana plantations. Nevertheless, the banana industry [439] continues to be a major source of cash income to the Tongan farmer, and the 8 1/4 acre bush allotments continue to be the major suppliers of bananas to the Produce Board for shipment to New Zealand.

313 One important effect of the increase in banana production in the 1960's was the need for locally produced banana cases which put considerable pressure on the timber resources of Tongatapu as well as 'Eua and Vava'u. In fact, by 1968, the timber resources on Tongatapu had been reduced to such an extent that milling ceased and was shifted to 'Eua (Government of Tonga, 1969a:16).

241 439 655 There has been a continuing attempt by the Tonga Produce Board and the Tongan Government to diversify export crops and broaden Tonga's agricultural base. In the case of watermelons, pineapples, plantains, tomatoes, and bell peppers, which are exported through the Produce Board, the results have been quite encouraging. 241 439 [441] Some crops are also presently being shipped through independent marketing agencies to New Zealand, Fiji, Samoa, and the United States. These include mangoes, tomatoes, bell peppers, egg plant, green beans, ginger, yams, taro, and sugar cane. The export values for these products for the five year period from 1967 to 1971 are included in Table 23.[A] [441] Most of these independent exporters are individuals or church or missionary societies, holding leasehold rights to large tracts of land

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[A] [See Category 439, pp. 152-155--Analyst.]

241 on which the bulk of their exports are grown.

439 [441] [655] Most export produce is, however, shipped through the Produce Board, and a great percentage of this is grown on the individual bush allotments. Vanilla, which is an important export crop in Vava'u, is now being grown in the Ha'apai group and on Tongatapu. Experimental export of cantaloupe (rock melon) and strawberries have also been made, and schemes to export onions, garlic,and corn to Fiji are under consideration. 242 439 In 1971, to encourage the production of other export crops, a laboratory was established and manned by a trained plant pathologist to study diseases and insects that are prevalent in the Kingdom.

443 Domestic Agricultural Income

The market place in Nuku'alofa, which began as a collection of periodic street vendors after World War II, evolved into a modern open-air facility known as Talamahu Market,which officially opened in October 1970. The market takes up four acres (1.6 hectares), contains 47 lock-up stalls, 80 tables, considerable floor space for additional sellers, toilets, taxi stands, and a bus depot.

443 438 The market deals primarily in native subsistence produce, mainly staple crops, vegetables,and fresh fruit. It also handles a limited amount of native fiber goods, tapa cloth, native medicine, beverages, spices, and more recently handicrafts. Some prepared food, firewood, shellfish, live pigs,and chickens are also sold outside the walls of the

443 438 [439] and other non-food items and raw materials; and, 4) an outlet for surplus export crops. This last function is of considerable importance owing to the undependability of both overseas markets and transportation; surpluses of melons, pineapples, bananas, and European vegetables are sold at Talamahu Market at reduced prices rather than being wasted.

443 656 The Talamonu Market, a smaller satellite market, was established in Nuku'alofa to escape government regulations adhered to at Talamahu Market, such as washing root crops 443 which renders them more perishable. It has similar functions to the Talamahu Market, but on a much smaller scale and has a narrower range of products.

443 438 Cash sale of agricultural produce and animals in the villages and rural areas includes the occasional sale of baskets of yams, taro, giant taro, or watermelons; the butchering and sale of cows or horses; and the sale of drinking coconuts, mangoes, tava, and vi-apples along the main roads. Vendors along the main streets of Nuku'alofa also sell drinking coconuts, sugar cane, peanuts, and seasonal fruits.

Although pigs and chickens are often sold at Talamahu Market as well as in the villages, the Vuna Government Market in Nuku'alofa is the major outlet for fish or meat. In 1970 and 1971, 166,926 and 160,771 pounds respectively were handled by the market (Government of Tonga, 1972b:15).

443 The sale of Tongan handicrafts is also a major source
438 of domestic cash income. Handicrafts, which include items
such as tapa cloth, pandanus mats, pandanus and coconut
443 leaf baskets, seed necklaces, flower leis, and wood carvings
438 are sold through a Tongan woman's co-operative marketing
439 organization, the Langa Fonua, at Talamahu Market and other
441 locations in Nuku'alofa, in special stalls set up on the
485 government commons on days when passenger liners are in
port and select locations near points of interest to sight-
443 seers throughout Tongatapu. Although some handicrafts are
438 exported to Fiji, New Zealand, Australia, American Samoa
439 and the United States, more are sold locally.

Labor Organization

241 Out of 126 sample households with bush allotments,
461 there were 198 males whose primary occupation was working
on these allotments. The average work per week was 23 hours
241 per man and 36 hours per household. Although these men
476 mostly worked as individuals or with family members in small
groups, the figures also include the hours of work in
[461] organized communal groups or as wage laborers on agri-
cultural allotments. For tasks such as clearing bush,
planting crops, harvesting, making tapa, or building houses,
many Tongans prefer to work in communal groups rather than
as individuals or households.

[621] The most common working group is known as the kautaha

241 as sorghum, rice, soybeans, and macadamia nuts, are very
242 rarely found on bush or town allotments. With the exception
of seeds for watermelons and garden vegetables, which are
generally purchased at the large trading stores in Nuku'alofa,
most planting material for crops grown on the allotments is
obtained by Tongans either from their own stock or from
friends.

231 The Department of Agriculture has, since 1968, begun
654 Pig, Poultry and Cattle Subsidy Schemes designed to upgrade
[241] Tongan livestock production. The Pig Subsidy Scheme, which
was initiated in 1968, provided three weaner pigs, bred
from New Zealand stock, to Tongan farmers who were willing
to construct suitable pig sties with cement floors and a
water supply, and to plant approved food crops--such as
manioc, corn, and sweet potatoes. The Department also
supplied the farmer with sufficient protein supplement until
pigs reached slaughtering weight. The pigs were then to be
marketed, after which the farmer would be credited with
money to buy his own breeding stock and protein supplement
to start his own pig farm (Government of Tonga, 1969a:15).

235 The Poultry Subsidy Scheme, initiated in 1971, provides
654 one-half of the initial poultry stock to those farmers who
construct poultry houses according to Agriculture Department
[439] specifications. The poultry distributed to farmers is
reared from New Zealand stock imported since 1970. Additional aims of the Poultry Subsidy Scheme include a

235 hatchery to sell day-old chicks to farmers at half the
654 current price of imported stock and the construction of
slaughtering facilities at the Government Farm in Vaini.

233 The Cattle Subsidy Scheme, which was initiated in 1972,
654 is a long-term project designed to make Tonga self sufficient in beef production. The Scheme subsidizes barbed wire fencing, a reticulated water system, and the clearance of land; it plans to distribute heifer calves at a subsidized price to members of the Scheme who meet minimum standards. The minimum size allotment required for membership in the scheme is 4 acres, although as of December 1971, 35 farmers who had been accepted by the Scheme had allotments averaging the standard 8 1/4 acres(Department of Agriculture,1971:37-
233 38). Also under the Cattle Subsidy Scheme is a pasture
654 improvement program, under which sirato(_Phaseolus atropur-_
246 _pureus_), pangola grass (_Digitaria decumbens_), Para grass (_Brachiaria mutica_),and elephant grass (_Pennisetum purpureum_) have been introduced (Nusbaum, 1972).

232 In addition to these primary schemes, the Department of
231 Agriculture has also imported Santa Gertrudis, Hereford,and
654 Friesian bulls and other cattle as well as high quality pig
[439] breeding stock to upgrade local stock through "Honeymoon Schemes" where farmers bring their animals to the Government Farm to be mated to these animals. In another program, stallions are taken to villages where they are bred to local

311 Grazing occurs mainly on hereditary estates or lease-
233 holdings, and out of the sample of 101 bush allotments only
one had any grazing land, approximately 3 acres (1.2
[245] hectares). Like some of the larger plantations, the
[137] allotment was partially fenced, was well planted with
coconut palms and scattered citrus, and other useful trees
with an understory dominated by Paspalum conjugatum
(vailima), Elephantopus mollis, Psidium guajava (kuava),
Stachytarpheta urticaefolia (iku'ikuma), and Dryopteris
000 invisa (hulufe). The practice of setting aside pasture
land will possibly become more common as a result of
initiation of the Cattle Subsidy Scheme in 1971.

241 With respect to cultivated land, it was often
difficult to differentiate between subsistence and commer-
241 cial crops. Bananas, watermelons, pineapples, garden
438 vegetables, and peanuts are grown primarily for export or
439 local sale but are occasionally cultivated for home use.
Conversely, many of the important subsistence crops, such
as yams, taro, plantains, and even manioc are often produced
128 for export and local sale. In order to simplify the
241 already complicated inventory scheme, it was decided to
tabulate as commercial crops all species such as bananas,
watermelons, and pineapples, that are commonly grown
commercially and to tabulate yams, taro, manioc, etc. as
241 subsistence crops. On this basis, of the total acreage
of 101 sample allotments, 30 percent was in subsistence

CHAPTER VI

CONCLUSION

128 The purpose of this chapter is two-fold: 1) to summarize the findings on the nature and importance of the Tongan agricultural system as practiced in bush and town allotments in 1971 - 72; 2) to suggest trends or developmental paths that the system is likely to follow.

241 Nature and Importance of the Agricultural System

The importance of agriculture in Tonga cannot be over-
241 emphasized. At the 1966 census, 67 percent of the Kingdom's
males over 15 years of age were either directly or indirect-
463 ly employed in agriculture, with 64 percent being directly
involved in agricultural production for household consumpt-
ion (Fiefia, 1968 : 74). Similarly, the results of the
questionnaire survey of households on Tongatapu indicated
that 53 percent of the heads of 150 households were full-
time farmers, 15 percent part-time farmers, 24 percent wage-
earners, and 8 percent unemployed. Of the wage-earners (the
majority of whom live in Nuku'alofa), 58 percent practiced
241 some gardening on their bush allotments. Agricultural
439 products accounted for more than 97 percent of Tonga's
export earnings in 1971 (Government of Tonga, 1972a).

241 One further measure of the importance of the agricul-
438 tural system is the rapid expansion of trading at Talamahu
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[438]

potato (Ipomoea batatas). These crops, all of which were infrequently cultivated before the turn of the century, now have become the most common items sold at Talamahu Market, and manioc and American taro were the two most widely cultivated crops in terms of acreage.

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Increased Cash Cropping

There will probably be a continued expansion of cash cropping to supply both overseas markets and the expanding urban population on Tongatapu. [242] [654] The major focus of government extension work is the expansion of commercial cultivation of bananas, coconuts, and a variety of other established crops such as watermelon, pineapple, garden vegetables, and root crops; and experimental crops such as macadamia nuts, onions, strawberries, and garlic. [435] The rising prices of products at Talamahu market is also a major incentive for an increase in commercial production of both traditional and recently introduced crops.

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Increased Cultivation of Crops Used for Handicrafts

With the rapid expansion of tourism throughout the Pacific, there is a great demand for the high quality Tongan handicrafts both in Tonga and overseas. Consequently, there could be a considerable expansion in the cultivation of plants such as paper mulberry (Broussonetia papyrifera), pandanus (Pandanus spp.), Job's tears (Coix lachryma-jobi), and bamboo (Bambusa sp.).

[1797-1799]

another time Tuku'aho condemned a woman to be sawn asunder lengthwise after 643
she fell under his displeasure. Such acts were bound to provoke reaction. In the 175
Civil War that soon ensued the barbaric practices that young Tongans had found [177]
in Fiji were repeated in their own country, with gross disregard for the nobler
principles of Tongan society.

For centuries there had been intercourse between Tonga and the islands 175
of Lau, the eastern group of Fiji. Many Tongans chose to live there. Other parts 177
of Fiji were visited by the Tongans who traded for the sandalwood of Macuata [167]
and the coveted red feathers of Kadavu parrots. The Fijians were renowned [439]
canoe-builders and they had the timber needed for this work. The making of
large canoes occupied from five to seven years and Tongans who came for these
often stayed in Fiji for that period. In the latter part of the 19th Century also
young Tongans went to study Fijian methods of warfare and the fortifications
they used.

> "Fiji became the war college of Tonga, whose young men were sent to this distant seat of interminable quarrels and petty wars, to acquire experience in the war parties of Fijian chieftains." (3)

The historian of Fiji, R. A. Derrick, has vividly described the experiences of young Tongans in Fiji in this period:

> "The young bloods of Tonga who thirsted for excitement and renown went to Fiji where there were alarums and excursions in plenty, war and rapine, easy living at the expense of their Fijian hosts, and freedom from the restraints of their elders. The islands of Eastern Fiji were to the Tongan warriors what the fields of France were to the knights and esquires of Plantaganet England. The Tongan youth had only to join a party going to Fiji for canoes to place himself in the way of gaining honour and fame to satisfy the most ambitious." (4)

Fiji had long been notorious for savage fighting and also for its disunity.
Tonga now adopted the same pattern of internecine strife. For a time the 175
authority of the Tu'i Kanokupolu hardly existed. Had such rebellions and disorder 669
continued, and had Taufa'ahau (the future George Tupou I) not appeared as the
leader of Tonga, the nation would probably have lost its independence eventually
as Fiji did for similar reasons.

That Tuku'aho met a rival chief of equally savage disposition was not only 175
a misfortune for him; it was a calamity for the whole country. Finau 'Ulukalala II, 669
son of Cook's host, showed ambition and ferocity that matched Tuku'aho's. The 643
nation paid a woeful penalty in the Civil War for the rivalry of these unprincipled 634
leaders.

Tuku'aho was treacherously murdered on 21 April 1799, after being Tu'i Kanokupolu for barely two years. Chiefs and people from all parts of Tonga had gathered in the ancient capital, Mu'a, for the presentation of tribute to the Tu'i Tonga. This was expected to be a time of peace with the sanctions of the religious festival. The arch-conspirators, Finau 'Ulukalala and his half-brother, Tupouniua, had a large body of men ready to carry out their designs against Tuku'aho. Immediately after the festival ended the two chiefs crept under cover of darkness into the house of the sleeping Tu'i Kanokupolu, guided by the smell of his sandalwood oil. After Tupouniua clubbed Tuku'aho to death Finau's men rushed in and killed the king's wives and other occupants of the dwelling.

The Civil War broke out as a campaign of revenge on the part of the royalists, the men of Hihifo, who were enraged by the murder of the Tu'i Kanokupolu whose residence was in their district. The Hihifo army fought not

aroused as his own voice rose and there were audible and emphatic responses 797
from the people. Once, when another local preacher declared, "The Gospel saved 643
me. Did it save anyone else here?", the king instantly jumped to his feet and 794
called out, "Glory to God, it saved me" — an indication of how demonstrative
he was in avowing his faith in these early days.

The wife whom Taufa'ahau chose from those he had kept in a polygamous 797
state was Lupe Pau'u, the bride he had taken from Laufilitonga who was now 644
the Tu'i Tonga. Afterwards she took the name Salote when she was baptized on 795
27 September 1834 by James Watkin.(13) The name Salote was taken from Queen 551
Charlotte, the consort of George III. Not only did the wife and a daughter of
Taufa'ahau take this name but also the illustrious great-great-grand-daughter of
Taufa'ahau, Queen Salote Tupou III (1900-65). The marriage of George and [585]
Charlotte according to Christian rites did not take place until 1834.(14)

After nearly two years in Ha'apai Thomas returned to Nuku'alofa to become 797
Chairman of the District following the departure of Nathaniel Turner. He had
now gained confidence through his success in Ha'apai. There was a ringing note
of hope in his reports:—

> "We have good reason to believe that Tonga will be a key to very many islands in these seas. The Tongan people have been famous in the sight of the islands of these seas for ages past." (15)

The new missionaries, James Watkin and Peter Turner, continued to supervise
the mass evangelization of the Ha'apai group, according to the model of their
predecessor. Peter Turner in his Journal referred to the school at Lifuka
beginning daily at 6 a.m. He described the baptisms, with sometimes as many [795]
as 100 received at one service. He noted the Tongans' fastidiousness about their [181]
appearance as seen in the care taken with special clothing for the baptismal [291]
service, the variety of patterns in the native cloth *(ngatu)*, and the neat plaiting
of the mats worn around the waist. Then he added, "What joy beamed on the
faces of the persons baptized".(16)

An unusual incident occurred at 'Uiha in June 1832. The schooner *Snapper* 177
came to the group for trading. First it called at Lifuka where the owner, Robson,
was given hospitality by the missionaries, Watkin and Turner, although he was
very critical of missions. The crew of *Snapper* tried to entice women aboard and
were annoyed with the missionaries when they failed. The vessel then went to
'Uiha, the only island in Ha'apai that had not then accepted Christianity;
Taufa'ahau warned the captain not to go to 'Uiha but the owner said it would
be easier to have trading dealings with the non-Christians there. A quarrel broke 177
out when the owner endeavoured to procure a large pot used by whalers. The 439
'Uiha people had obtained it from a ship wrecked near Tongatapu about fifteen 609
years before. While the argument about this deal was proceeding the chief Malupo
was induced to go on board the *Snapper*. There he was bound, in order to force
the people to come to terms and secure his release. The vessel threatened to sail
off with the chief unless the pot was brought but it remained at anchor a short
distance from the shore to do more trading. (It was noted afterwards by the
Christian converts at Lifuka that all this was happening on the Sabbath!) The
islanders attacked the crew when they were off their guard, killed the captain
and two others, and released their chief. They then brought the ship nearer shore
and began to plunder its cargo; the clothes of the owner and crew were taken
from them. When news of this affray reached Lifuka, Taufa'ahau set out with a 177
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INTEGRATING TOURISM WITH OTHER INDUSTRIES IN TONGA

CHARLES F. URBANOWICZ

Tonga, with an area of 289 square miles, is approximately 550 miles southwest of the islands of Samoa and approximately 450 miles southeast of the islands of Fiji, in the "heart" of Polynesia. The principal island of the group is Tongatapu (100 square miles). The estimated population of the Kingdom is slightly over 100,000 (1975). Most Tongans speak English as a second language. The country is an independent Kingdom of the British Commonwealth of Nations.[1] [A] 131 161 191 642

TOURISM AND THE TONGAN ECONOMY

Tongans are primarily exporters of agricultural commodities. Tourist development is still in the relatively early stages. Given certain conditions, tourism could be considered a major industry of the future for Tongans. The Kingdom has taken the position that the potential of the tourist industry is much greater than any other aspect of the economy.[2] [B] This "potential" may well be debated, for without adequate design-for-tourism, the impact of tourism could be disastrous. 179 457 [439]

Tourists arrive in Tonga either by private yacht, by cruise ships which make one or two-day stops,

[p. 88-A]

A, B, [For footnotes, see p. 93-A--Analyst]

179 457 or by air from either Fiji or Samoa. Although accurate estimates are difficult to make, the Director of the Tongan Visitors Bureau (TVB) wrote that for 1973-1974 foreign-exchange receipts generated through tourism amounted to approximately (U.S.) $2,154,000, making tourism the second largest generator of foreign exchange after copra (U.S., $3,052,000). For 1974-1975, it was estimated that tourist-related revenues in Tonga rose to (U.S.) $3,270,000, and by 1980 it has been projected that tourist revenue could amount to as much as (U.S.) $15,300,000![3] A

439 The role of tourist-related revenues in the Tongan economy is increasing. A consequence of this growth is that although Tongans export agricultural products, imported foodstuffs account for an increasing portion of Tongan imports. In 1973, for example, Tongans exported a total of almost $5,000,000 worth of materials. In that same year a total of $12,000,000 worth of materials was imported, of which foodstuffs constituted $4,400,000 or 27 percent. In February of 1975, Tongans imported some $1,400,000 worth of items, and foodstuffs amounted to some $713,000 or 51 percent.[4] B

[p. 88-B]

A,B.[For footnotes, see p. 93-A--Analyst]

With increased tourist growth, Tongans are
457 in direct competition with the tourists for space and for
439 imported foodstuffs. Unless a tourist lives with a Tongan
family, and very few do, the main tourist diet consists of
177 fruits and breads from Tonga and imported foodstuffs.
This importation of foodstuffs—much of it because of
439 its relation to tourism—is also reflected in the Tongan
435 economy by the Consumer Price Index (CPI). The CPI,
434 heavily biased towards food items, was established in
1969 with a base of 100.0. In six years, the CPI has
reached the astronomical figure of 172.4 (Figure 2).

459 Ever-increasing amounts of food must be
imported to feed the growing number of tourists who
439 compete with Tongans for certain goods. Despite this,
177 tourist growth is encouraged. The impact on the "average"
Tongan is startling, especially when he sees the
[435] price of food double in a single year at the local market.
The impact on children is considerable. The Tongan
[146] Ministry of Health has pointed out that "protein-calorie
malnutrition" is prevalent among many young
Tongan children to a disturbing degree.[6] A

457 Although the inflationary spiral in Tonga
458 in the last few years, as evidenced by increased consumer
prices, is obviously related to the generalized worldwide
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[p. 89-B]

A. [For footnote, see p. 93-A--Analyst]

121 a simple, stable base advancing through strata which becomes progressively more complex.

For Tonga, and indeed for other Pacific
457 Islands, tourism should develop in conjunction with—
179 and perhaps only after—several basic components of the economy have been stabilized. After this, an organized tourist-oriented infrastructure must be developed including trained individuals and increased and improved transport. Tongans have gradually developed both facets of the economy, although more may be necessary.[10] A

Too many tourists in Tonga could "drain" the carrying capacity of the land (as well as the patience of the Tongans). Basic food-producing industries of the Kingdom must be further improved. For example, in
[439] 1974 Tongans imported 560 tons of frozen fish, while
[228] the Tongan Government fishing vessel caught only 66 tons, roughly a ration of eight to one. In an attempt to
457 solve this, the Tongan government is encouraging loans
179 to improve the fishing industry. In addition, a three-year program funded by the United Nations Develop-
228 ment Programme (UNDP) is aimed at developing the
648 local fishing industry. The UNDP will provide Tongans with some $230,000 as well as technical and managerial assistants to work with the fishermen.

457 The UNDP (along with the International
648 Labor Organization) has also provided Tonga with basic aid toward improving the tourist infrastructure: a three-month course in tourism began late in 1974 and ended in January of 1975. Over one hundred Tongans took part in the training session. Another upgrading course started in February, 1976.

Development of tourism design must go
167 hand in hand with other aspects of Tongan life: more
464 must be done to encourage the emigrating Tongans to stay in the Kingdom. Population pressure, high unem-
[457] ployment, the increasing influence of Western values,
[179] and the availability of relatively well-paid work in New Zealand compel many young Tongans to leave Tonga.
167 This movement of Tongans overseas markedly affects
464 the Tongan economy, as recent trends make clear: private and government building in Tonga has fallen behind
179 as a result of lack of skilled workers, and equipment is lying unused. One government building project lost two-thirds of its staff. What is true for the construction trade
167 is also true for the private farmer:

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> If the drain of laborers to New Zealand goes unchecked, a crisis could develop in Tonga's agriculture. This warning is sounded by the Director of Agriculture, Mr. Tomasi Simiki, who said this week the migration of workers to New Zealand—even temporarily—was already being felt in farming. Farmers are producing less because they

[p. 91-A]

A. [For footnote see p. 93-A--Analyst]

167 464 179 241 [435] simply cannot find the same number of workers. "Price-hiking is becoming unavoidable as food items become scarce," Mr. Simiki said.[11] A

871 464 [645] In 1972 the Tongan Assistant Secretary in the Ministry of Finance pointed out that "every year only about 5 percent of the school-leavers find wage employment in the industrial and tertiary sectors" of the Tongan economy.[12] B

457 434 464 As a result of this untenable situation, the New Zealand overseas work scheme was begun in 1971. This system contributed significantly to Tonga's favorable balance of payments in 1972-1973. In 1971-1972, net remittances by Tongans working overseas totaled some $1,250,000; and for 1972-1973, this had increased to approximately $2,000,000. This money, along with donations, gifts, and contributions from overseas ($2,150,000), helped to offset the Tongan trade deficit.[13] C (In 1972-1973 gross tourism earnings provided Tongans with some $1,530,000. Compared with the previous year, tourism revenues increased by some 24 percent.)

[439] Though the work scheme improves the balance of payments in Tonga, most of the money earned by Tongans in New Zealand is eventually returned to New Zealand to pay for increased imports. Also, the [593] [586] overseas work scheme appears to be contributing to family tensions and an increased divorce rate in Tonga.[14] D Crocombe has criticized the overseas work scheme as [648] a form of "poorer independent islands subsidizing their rich big neighbors," even though the Tongan government requested the New Zealand government to initiate such a work program.[15] E While there may be some short-term benefits to Tongans, long-range analysis of this work scheme may prove Crocombe correct.

179 464 457 The Tongan government and private entrepreneurs must encourage the diversification of the Tongan economy beyond short-term overseas work schemes. Tongans, for their part, must realize that tourism is not the ultimate solution to economic stability. A 1969 United Nations consultant's report stated:

> There is no immediate prospect of absorbing in gainful employment more than a very small proportion of those who cannot find work on the land. The visitor industry (tourism) is unlikely to be a really significant employer of labor . . . .[16] F

457 434 Besides being small-scale, tourism is unreliable as a steady source of income for Tongans. In 1972, for example, at least forty tour groups cancelled their visits to Tonga because of the uncertainty of air travel to and from the Kingdom. Late in 1973 and early in 1974, five cruise ships cancelled their stops at Tonga

[p. 91-B]

A, B, C, D, E, F, [For footnotes, see pp. 93-A &93-B--Analyst]

457 because of the international oil crisis. These cancellations
434 resulted in a large loss of expected revenues.

Not only must the industrial sector of the
179 economy be expanded and diversified beyond tourist
744 development, but public health problems in Tonga and
457 other islands must be dealt with. For example, in the
[164] past Fiji and Tonga have experienced outbreaks of
mosquito-carried Dengue fever. The fever not only
incapacitates and demoralizes the native population, it
frightens away tourists as well.

Tongans must develop a balanced design
179 of tourist development, overseas work schemes, combined with the development and improvement of local living conditions, before the economy can be stabilized. The government is currently working on its Third Development Plan for 1975-1980, and new industries, such as local fish-canning and meat-processing plants,
179 have been suggested.[17][A] Planned overseas aid from New
648 Zealand in the amount of $NZ5,000,000 over the next
three years will be used to encourage and develop rural programs throughout the Kingdom.[18][B] Such overseas support of the non-tourist sectors of the economy, combined with assistance from the United Nations Development Program for the tourist sector, could provide Tongans with balanced development.

The future of Tongans lies in greater cooperation with one another. In February of 1975, Tonga
[439] joined the European Economic Community as an asso-
[435] ciate member to obtain eventual stabilization of prices of Tongan items exported to Europe and possible financial aid from Europe. In 1974, Tonga and Fiji joined in a tourist promotion scheme, and more such Fijian-Tongan cooperative efforts are being planned. Late in 1976 the Pacific Islands Tourism Development Council Conference was held in Tonga. The theme of the conference revolved around cooperation in tourism efforts, and representatives were in attendance from American Samoa, Australia, the Cook Islands, Guam, Hawaii, Japan, Nauru, New Caledonia, New Zealand, North America, Papua New Guinea, Tahiti, the Trust Territory of the Pacific, and Western Samoa! Clearly, then, ideas about cooperative efforts are increasing. In August of 1976 Tonga was also represented at the Young Nations Conference held in Australia. The theme of that meeting stressed research and development in planning for the people of the South Pacific. For an integrated design for the future, all peoples should utilize as many resources as possible.[19][C]

Oil may prove another source of foreign
315 exchange for Tonga. In November of 1968, a visiting
648 Australian geologist confirmed natural oil seepage on
Tongatapu Island, and exploratory drilling was conducted by a European-based consortium in 1970 and

A, B, C [For footnotes, see p. 93-B--Analyst]

121 examines the impact of tourism on the Tongan economy and the social
457 and cultural problems associated with the advent of recent mass tourism.

The Economic Problem

433 Tonga is primarily an agricultural nation of small landholders. Despite
Government efforts to modernize and increase food production, the
natural resources of the islands are inadequate to feed the growing
population. For greater cash-flow, primarily to meet Tongan consumer
433 demands for Western products, Tonga has become an exporter of
439 agricultural commodities. It is germane to note, however, that foodstuffs
[177] (especially meat and chicken) account for almost a third of Tonga's
annual imports. In 1973, for example, total exports amounted to almost
us$5,000,000, with copra being the most important export (at
146 us$3,347,000). Dietary inadequacies among Tongans, occasioned by high
food costs, are best assessed by the Minister of Health who stated in 1973
that protein-calorie malnutrition is prevalent among young Tongan
children to a disturbing degree. In the same year seventeen cases of
severe "nutritional deficiency" required hospitalization, two of which
became fatalities.

458 Spiraling inflation has eroded Tongan buying power over recent years,
as indicated by the Consumer Price Index (CPI). Established in 1969 with
435 a September base of 100.0, the CPI is based on the purchasing power of a
"typical" Tongan family earning less than us$37 per week. Heavily biased
towards food items (64 percent of all items on the index), the CPI has
risen steadily (Figure 1) to 172.4 in six years. Increases in food prices, both
domestic and imported, have consistently contributed most to this
upward trend. In one of the largest overall increases, 11.4 percent in the
quarter of June–September 1973, the fruit and vegetable component of
the CPI increased by 46.9 percent. In the second largest increase, 11.2
percent from December 1972–March 1973, this same subgroup of basic
staples increased by 33.1 percent, while the cereal subgroup (bread, flour,
and rice) increased by 31.6 percent.

464 Unemployment is another critical economic problem. In an island
world where land is extremely important, many adult Tongans are
without land. Although every Tongan male, upon reaching the age of
[882] sixteen (and becoming a taxpayer) is entitled to some "bush land" for
crops and "town land" for a home, there simply isn't enough to go around.
[423] The Assistant Secretary in the Ministry of Finance pointed out that in
1966, 59 percent of all men over sixteen years of age who were entitled to
tax allotments were landless and, no doubt, this proportion has increased
by 1971. Even if the unused areas are used it may provide employment
for about thirty-four hundred men, still leaving thousands unemployed.

457 not know enough of their own culture and history (or at least the aspects
654 of touristic interest), so the TVB published a pamphlet for local distribution to remedy this particular complaint. The government has also built small airstrips to encourage tourist travel to outlying islands and has allocated substantial sums of money for hotel expansion and construction.
457 With the help of overseas (primarily Australian) backing, new hotels have been recently constructed on Tongatapu and Vava'u. Japanese companies have also expressed an interest in joint investment with the Tongan
648
654 government, in facilities that would serve the public and *especially* entice
177 the now almost nonexistent Japanese traveler to Tonga. With Japan in mind, the Tongan monarch traveled to Japan, exchange clubs have been
[643] established. Tongans have been encouraged to visit Japan. Late in 1976
[484] the Japan/Tonga Friendship Fellowship opened a US$35,000 resort clubhouse in Tonga, in an effort to develop growing contacts and increase guests to Tonga. His Majesty also visited Hawaii in late 1976 to assess the role of tourism, as well as the role of Tongans in tourism at the Polynesian Cultural Center (see chapter 14).

457 Tourism, however, increases the economic problems—especially the need for additional imported foodstuffs. Air passengers, for whom
● 439 facilities are largely being constructed, have to be fed, and although many
262 enjoy the local fruits and bread (made from the imported flour), few would be content for long on the relatively bland Tongan diet of yams, taro, and fruit. Tongans are, in effect, competing with the tourists for the
[435] imported foods. The ever-increasing quantities of food that must be imported to feed the growing number of tourists contributes to the
[171] steadily rising CPI. A similar situation prevails in Fiji, as Ward (1976, p. 171) notes:

> Some [Fiji] hotels, in the interest of greater economy and convenience, only provide a strictly limited choice of meals and the sort of meals which tourists expect to receive in their home countries, e.g. of the steak-hamburger-mixed grill variety. Many hotels argue that this is all the tourist wants although the best hotels do provide more extensive menus. The majority [of hotels, however] do provide the food which is produced and consumed by the local inhabitants and this compounds the problem of buying requirements from domestic producers.

Ward also states that despite the availability of many local foodstuffs tourists might consume, hotels in Fiji prefer to purchase their requirements overseas because, it has been argued, "they can only then be assured of continuity in supplies and of a consistent high standard of quality."

457 Tourism has grown rapidly in Tonga, but it could evaporate just as quickly. Tongans occasionally have experienced situations when the anticipated tourists failed to arrive. In 1972, at least forty tour groups cancelled their planned air visits to Tongatapu because the tour operators

EIGHTEENTH CENTURY TONGA: NEW INTERPRETATIONS OF TONGAN SOCIETY AND MATERIAL CULTURE AT THE TIME OF CAPTAIN COOK

Adrienne L. Kaeppler

Bernice Pauahi Bishop Museum

175 Although Tonga was discovered in 1616 by Le Maire, fleetingly described by Tasman in 1643, and the northern islands were seen by Wallis in 1767, real knowledge of Tongan culture had to await Captain Cook's visits. The written accounts 175 and ethnographic collections resulting from Cook's voyages are often our major source for understanding the character of Tongan culture in the eighteenth century. 127 Yet, despite drawings, descriptions, and identifications which are outstanding for their time, little work has been done to interpret this early material in the light of other kinds of research in order to delineate the relationship between material culture and the social system.

[121] This article presents the preliminary results of several years' research in the field, in libraries, and in museums in the Pacific, America and Europe, in which materials from Cook's voyages have played a central role. Cook's visits to Tonga (1773–4) on his second voyage are most important here. For although the visits were short, a [439] great deal of trading was done; and only specimens and descriptions collected at [177] that time are certain to be relatively free from European influence.[1]

Despite the abundance of artefacts and descriptions, their location and inter- 127 pretation are not as simple as one might expect.[2] Cook's crew often sold their [439] 'curiosities' to the highest bidders and labels seldom accompanied them. At that [175] time, moreover, some of the outstanding museums were private, for example, those of George Humphrey, The Duchess of Portland, Daniel Boulter, William Bullock, and especially Sir Ashton Lever. Most of these early collections were eventually sold at auctions, and so the specimens became widely dispersed, often with the subsequent loss of the association with Cook. The owners of such 'cabinets of curiosities' usually had little interest in the precise identification or technical significance of the material, and items were regularly labelled simply 'South Seas'; indeed, 'Otahiti' often became a catchall term for the entire area. Some objects found their separate way to the British Museum, but little care was exercised in labelling them, either as having come from Cook's voyages or as to their original provenance. In fact most of these specimens seem not to have been numbered or labelled at the time of their acquisition. In the late nineteenth century, however, they were catalogued along with non-Cook specimens, apparently by Edge-Partington, and given a series of numbers reflecting their supposed origin. The collection was divided into four categories: *viz.*, HAW (Hawaii); TAH (Tahiti); NZ (New Zealand) and EP (eastern Polynesia). Some objects were assigned no numbers at all, and the Tongan material was for the most part not

169). And, as mentioned above, ragged mats were worn for mourning ceremonies. 175 285
However, Cook does not list the function of mats as ceremonial gifts, which is [513]
understandable because he did not attend complete funeral or wedding ceremonies [292]
—the main occasions of ceremonial giving. [765]

Forster's *Catalogue of curiosities* lists eight plaited items, seven of which are called [431]
mats and one an apron, and George Forster mentions 'their elegant mats, which for 127
workmanship and variety excelled even those of Taheitee' (1777: I, 439). 285

Number 53 in the Forster collection is listed as 'a strong matt, with a black
pattern' (plate 2*a*).[A] It is made of light-coloured pandanus (127 cm. × 207 cm.)
decorated with a diagonal pattern of black pandanus, and appears to be unfinished
if spread out. This item may be a *ta'ovala la*. According to Tongan tradition certain [565]
matāpule (ceremonial attendants), whose function it was to supervise ceremonies
such as installations of title holders and funerals of chiefs, wore a waist mat decorated
with black pandanus that came to a point in the back. If this mat were folded
diagonally and then wrapped, the design would be on the outside, a triangle would
hang to the back, and the part that was folded inside need not be decorated. The
only other example of a *ta'ovala la* so far located is in the Museum and Art Gallery,
Glasgow, and it is plaited so that one side comes to a triangular point and need
not be folded.

Item Number 56, listed as a mat 'pierced with holes' (plate 2*b*),[A] is probably one
of the items George Forster described in his journal as aprons, 'curiously wrought
of mats in resemblance of fretwork' (1777: I, 474). This type of garment is a *kie fau* [314]
or *teunga fau* and is made of the inner bark of the hibiscus tree (*fau*) that has been
partially rotted in sea water. The texture is fine and delicate, and the manufacture
is a difficult enterprise in contrast to the plaiting of sturdy pandanus mats. *Kie fau*
were worn as waist mats only by chiefs—*kie fau* indicating chiefly rank, just as
wearing the *ta'ovala la* indicated that one was a certain kind of *matāpule*.

There are three different types of *kie fau*. The type represented by the Pitt Rivers
example (160 cm. × 86 cm.) is plaited with square holes and has a fringe of tabs
sewn on with twisted '*olongā* (*Pipturus argenteus*) fibre. A second type with much
more openwork is found in Museum collections in Cambridge, Dublin, Bern, and
Newcastle—all of which have Cook collections—but it is not always known that
these particular specimens are from Cook's voyages. The third kind of *kie fau* has
small plaited tabs that form an upper layer plaited out from a solid bottom layer.
This type is in the Cook collections in Vienna and Stockholm, and there is one in
Madrid that was collected by the Spaniard Malaspina in Vava'u in 1792. The manufacture
of these types of *kie fau* was probably discontinued in the early nineteenth
century. Today *fau* fibre is crocheted into openwork patterns for similar, but more [178]
easily made, decorative pieces that can be worn by anyone. The openwork
technique is still known, but the more easily worked pandanus is used instead of
fau. The functional replacement of the *kie fau*, i.e., the chief's waist mat, is now a soft, [439]
fine pandanus mat decorated with red feathers and imported from Samoa. This
suggests that when the Tongan high ranking *kie fau* ceased to be made there was
nothing of local manufacture that was of high enough status to replace it, and a
foreign product was brought in.

But the most precious of all the plaited items to the Tongans, and to Cook's men [175]
as well, were the so-called 'aprons of cocoanut fibre'. Cook described them in his [531]

[A] [See End Plate 2, following p. 220--Analyst]

and a companion in the same museum are the only examples of fly whisks made in 293
this manner. The handles are completely incised in zigzag patterns and inset with 127
ivory pieces in the form of men, birds, stars, and crescents (Moschner 1955: 222, 643
224). The carving and ivory inlay are done in the same manner as the incising of [531]
Tongan clubs, but handles of Tongan fly whisks are usually uncarved. Since fly [532]
whisks are only used by chiefs in Tonga, one would suspect that such an elaborate one would have been the possession of a special chief. The existence of the information in the Leverian sale catalogue—that it belonged to Paulaho—was the corroborating evidence we needed.

A specimen in the Pitt Rivers Museum illustrates the usual early type of fly 293
whisk (plate 4a). It is made with a slightly tapered, polished wood handle and a whisk 127
of coconut fibre, bound by a wrapping of twisted *'olongā* fibre. It is 53 cm. in length and a small section of the whisk is braided. An almost identical piece exists in the Forster collection in Göttingen, and there are two similar ones in the British Museum. The Pitt Rivers example is a good type specimen. It is the usual Tongan type in early collections, its provenance is given as Tonga in Forster's list, such
whisks still exist in Tonga, and an engraving in Labillardière (1802: plate 33) is [114]
virtually identical. Another whisk of this type, but with a bone handle, exists in Bern in the Webber collection from the third voyage, but its provenance is given as Tahiti. It is certainly Tongan, and can now be separated from the Tahitian materials.

The fly whisk, *fue kafa*, was an important symbol of rank in Tonga. It was mani- 293
pulated in a specific manner, called *fuefue*, which took practice and deftness of 559
hand. A Tongan proverb puts it nicely: 'Who is this fellow who wields his *fue* [538]
like a commoner?' This proverb is used today for anyone who is presumptuous beyond his status. The *fue* is a good example of the reflection of social stratification
in material culture. The Tu'i Tonga was chief of the chiefs. The *fue*, a visual status [643]
symbol that could be used by all chiefs, was differentiated when used by the Tu'i [565]
Tonga in a manner befitting his high rank.

Incising of the designs in wood was done by means of a shark-tooth implement 412
represented in the Pitt Rivers Museum by Forster specimen Number 174, 'shark's 127
tooth set in wood, from the Friendly Isles' (plate 4b(i)). Before Forster's Cata- [237]
logue was found in 1969, this specimen was noted '?Tahiti.' This provenance may have been derived from comparing it with a similar specimen in the British Museum that is in the TAH series, but one must remember that the TAH series reflects the views of a nineteenth century cataloguer and that, for the most part, the Tongan items were not separated from the Tahitian. Also in reference to this
erroneous British Museum provenance, Duff in his recent catalogue ascribed a [114]
similar tool in the Canterbury Museum, New Zealand, to Tahiti (Duff 1969: 26). But I think there can be little doubt that this tool type is Tongan.

We are indebted on this account to Forster for two reasons. Not only does he 412
state clearly that this tool is from Tonga but he also gave its companion tool (plate 175
4b (ii)), a nail set in a handle of bone. This specimen (Forster 101a) he lists as 'An old [177]
nail, brought to the friendly Isles by Tasman in 1643 and preserved by the Natives, & used as a gouge or borer'. Thus, though one might question his attribution of the shark-tooth tool to Tonga, one could hardly question the nail attribution. And this is crucial, for the hafting is virtually identical. Reinold Forster describes
this piece, or a similar one, in his *Observations:* '... when we landed at Tonga-tabu [439]

A. [See End Plate 4 following p. 220--Analyst]

412

175 one of the natives sold a very small nail carefully fastened in a handle of hard wood,
[439] and tied to it by strings of coconut-core. This nail was undoubtedly left by Tasman,
who was there in 1643, and consequently had been preserved 130 years, and is now
[127] lodged amongst other curiosities in the British Museum' (1778: 368). Perhaps there
412 is such an implement in the British Museum with a nail lodged in hard wood;
127 however, they have no record of it. The Pitt Rivers specimen has a handle of
bone—a perceived Tongan alternative which probably indicated that its use was
[554] restricted to the higher ranks as we have also seen in the bone and wood handles of
fly whisks (i.e., Bern and Pitt Rivers specimens). It is certainly possible that there
were at least two such hafted nail implements, for Cook discovers on his third
[175] voyage, that,

> [177] on my enquireing of Fattafee the King how they came by the Knowledge of iron and a small
> [439] iron tool I saw here last Voyage, he told me it came from Onnuahtabutabu [Niuatoputapu],
> and on asking him how the people of that island came by it, he said one of them sold a Club
> for five Nails to a Ship which came to the island [Wallis in 1767], and that these five Nails
> after wards came to Tongatabu and were the first they had seen, so that the Iron they got
> from Captain Tasman must have been worn out and forgot long ago (Beaglehole 1967: 162).

Two implements almost identical to the Forster shark-tooth example exist in
Dublin and another in Vienna. The Vienna specimen was noted in the first inventory
[284] of the collection as an engraving instrument from Tonga (Moschner 1955: 139),
and has a bark cloth padding under the sennit binding—a very Tongan way of
hafting, also used for the hafting of adzes. Finally, yet another specimen is en-
412 graved in Labillardière (1802: plate 32) with a very good accompanying des-
322 cription:

> we saw several [Tongans] who were employed in carving others [clubs] with shark's teeth fixed into the extremity of a piece of wood. We were astonished to see them quickly notch, with this sort of chisel, *casuarina* wood, notwithstanding its extreme hardness. Others already used with much dexterity some of the iron instruments which we had given them (1802: 147–8).

In this case there is no possibility of confusion with Tahiti, for Labillardière did not go to Tahiti.

One specimen in the Pitt Rivers Museum (plate 5a)^A appeared at first to be not
714 Tongan at all and its use was even more mysterious—a large thin plate of whale-
127 bone with the edges curved and having three holes at one edge and labelled Number
237 62. Before the original Forster catalogue was found, it was labelled New Zealand.
The *Catalogue*, however, lists Number 62 as 'a Shield made of Bone, probably
of a cetaceous animal', and is designated as Tongan. In George Forster's account
[175] of the voyage we find the description and collection information: 'we bought a
[439] large flat shield or breast-plate, of a roundish bone, white and polished like ivory,
about eighteen inches in diameter, which appeared to have belonged to an animal
of the cetaceous tribe' (1777: 455). The Pitt Rivers specimen measures 18 inches
and an almost indentical specimen exists in the Forster collection in Göttingen.
There is also a larger and thinner one in the British Museum (no accession information or provenance). How or when these specimens were used, we are unfortunately
301 not told. One could suggest, however, that this is a large and ostentatious rendering
237 of a shell breast ornament in whale bone, which was a material of high status. The
127
[554]

A. [See End Plate 5, following p. 220--Analyst]

/20 cont./

181 trouble getting twice the amount of tobacco
434 for their money; in the Ha'apai group the
435 Tongans who start businesses on their island
"forget" the price of individual goods, which
are then often sold for considerably less than
on the main island.

181 Toward the European, too, the Tongan is good-natured, generous and
177 hospitable; however, among the natives who have many dealings with
439 Europeans there are a few who try to exploit and overcharge the Whites--usually in an inept manner, to be sure. Yet it seems noteworthy that the Tongans of the small islands, amid the flood of money of the postwar period and in view of their great interest in European goods, have not succumbed to copra- and money-fever. The reasons for this are less self-discipline and will power than the relatively small natural needs, as well as the basic Tongan trait of imperturbable equanimity.

181 These natives have also kept their cheerfulness--apparently undiminished. (13)

[113] 13. See also G. Forster, loc. cit. IV, p. 359; Voyage de Dentrecasteaux. ed. by M. Rossel. vol. I. Paris 1808, p. 308/309; Ch. Wilkes, Narrative of the United States exploring expedition /cited in English/. vol. III. London 1845. p. 26; H.N. Moseley, Notes by a naturalist /cited in English/. London 1879. p. 287.

181 The majority of Tonga have a strong sense of humor. Naturally,
522 boys and girls are particularly cheerful and merry, even to the point of boisterousness. The older ones, while observing a certain self-control and restraint, are not much different, so that even in between the lamentations of a cortege a cheerful comment accompanied by a fleeting smile may by noted. Tongan humor often satisfies European
[831] demands, frequently it is rather simple and silly for the serious White, and sometimes it leaves nothing to be desired in the way of

/99 cont./
276 and Fiji, for example, where this custom has also been preserved.
[171] Kava is, without reservation, the essential element of community life
in Tonga.

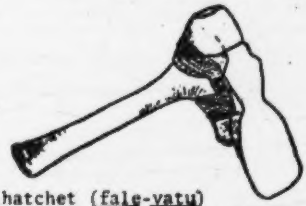
[249] Kava (Piper methysticum) is still planted on all Tongan islands
However, on a few it is scarce (as a result of reduced planting, too
[438] great consumption or destruction by pits), and the kava roots are
obtained from other islands of the Archipelago, often by the bag, at
five £T a bag (approximately 47 German marks), or are bought by the
piece in (retail) shops in the village. When people want to drink
kava they take a few roots and go to a house in the village that
seems appropriate (with regard to owner and space) and ask if kava
might be made. Or, if one or several friends happen to be in a
person's house, its preparation is immediately begun, generally /100/
by a young girl (or a woman), more seldom by a man. This girl pounds
the root between stones (maka toto lalo and maka toka 'olunga) over
a mat (fala tuki kava) and pours the coarse flour thus obtained into
the kava bowl (kumete kava). The bowl is the most important piece
[415] of property of every household; it is artistically carved out of a
[322] block of wood and has a diameter up to one meter and four to sixteen
[439] /sic/ feet. Many of these bowls come from Fiji, but they are also
made in Tonga on most of the islands, chiefly on 'Eua. As needed
[415] (depending on the quantity of kava meal), water dipped from a zinc
bucket standing in readiness is ladled out with a coconut shell
(ipu kava) and poured onto the meal in the bowl. The meal is kneaded
in the water. Then with a bundle of bast (fau tau kava) (from fau =
Hibiscus tiliaceus) they take the remnants of kava out of the liquid,
wring out the bundle with a firm grip over the bowl and shake the
squeezed-out residue (which, after drying, is sometimes used a
second time) onto the mat. With the bast bundle a portion of the
now finished kava drink is taken out of the bowl and the coconut cup

/136 cont./

412 and make the handle themselves (length 85-90 centimeters) out of wood
[824] of the toa tree (Casuarina equisetifolia L.).

There are various transverse hatchets; the iron blades are bought
[177] and then hand-shafted as desired. To make a fale-vatu lahi the
[439] natives like to take an ordinary European hatchet blade of the type
[824] which was formerly traded in Tonga by German commercial firms, and
provide it with a forked-branch shaft of the feta'u tree (Calophyllum
[284] inophyllum). The blade which lies crosswise is fastened (lashed) with
[283] coconut-fiber cords (kafa) that are drawn through the eye (provided
for the handle by the European factory). The blades necessary for such
[439] transverse hatchets can at present no longer be bought from merchants
in the Archipelago; the ones in use, which some of their present
owners have inherited from their grandfathers, are therefore

[284]



Transverse hatchet (fale-vatu)
with European blade (Expedition Collection, No. 102)

of special value and handled with great care. Sometimes the rear
abutment on the shaft, which has to absorb the blow, is protected against
splintering by having some six nails driven in. In a typical specimen
of the fale-vatu lahi, the measured length of the blade was 18 centimeters and the maximum width 15 centimeters, the length of the handle
[342] was 47 centimeters. In house-building, longitudinal grooves are cut
[335]

/137 cont./

412 [439] [824] The large machete (hele pelu) is generally bought readymade (total length 60-70 centimeters), and is easily obtainable in the commercial centers of the Archipelago. The knife tip which is bent slightly upwards is usually cut off. The frequently broken handles are skilfully replaced by self-made wooden shells (feta'u wood). This machete is an all-purpose instrument. In house-building it serves for the most diverse tasks wherever something needs to be cut, knocked off, or leveled (planed), and for many Tonga it replaces the small transverse hatchet. Beyond that, the knife has a wide range of uses in the hands of men, women and children, from cutting finger- and toenails to various tasks on the plantations.

342 463 331 Many Tongans (especially commoners) feel it is important to erect what they regard as a well-built, solid dwelling on their property, and secure the help of a specialist who carries out the work with several helpers (relatives of the "owner," his friends and other villagers). If, later, a second house is needed on his place, he usually builds it himself (alone or with the help of members of the family and other relatives or friends).

In 'Uiha/'Uiha (Ha'apai), in 1952, 76 dwellings with ancient Tonga ground plan were carefully examined.

342 463 465 331 Of these, 54 were built by house builders (or Tongans who were regarded as house builders). Until recent times their work was acknowleged only with food. In only seven cases was the builder paid with money (sums between 8 and 40$ T.); four of these cases involve an impoverished refugee from Niu Fo'ou who, in 1951, worked only as house builder in 'Uiha, hence these cases should be regarded as exceptions. In two cases that took place 50 years ago, the builder was remunerated with mats and tapa, while in a case that occurred 30 years ago a rather large quantity of coconut-fiber cord (kafa) was given.

342 463 331 The remaining 22 houses were built by natives who are not special-

/140 cont./

283 and then the three-strand cord is plaited from these small bundles.
283 This method of preparation probably corresponds to the ancient Tongan
178 procedure except for two deviations: In the old days it was probably
generally customary to "bake" the coconut husks in an earth oven and
only then to place them in the sea; occasionally this complicated
method is still used today by leaving the husks (wrapped in *koko*
leaves) (373)
for hours or days (up to one month) in the earth oven--soon grown cold--and thereafter keeping them in sea water for two or three weeks.
[171] Secondly, in former times, the natives probably wound the little fiber
bundles with a single fiber before plaiting them, as is occasionally
still done in Samoa; this procedure is slower, but guarantees
greater durability of the cord.--Making coconut cords is men's and
[462] women's work, but is done mostly by the men. Often, several men do
[574] the plaiting together, and they also like to do this work in the kava
[276] gatherings. However, the cords are much less often made than they
were even a few decades ago when one constantly saw men plaiting *kafa*
in the kava circles. In those days they apparently also liked to lay
in a supply, and the demand for better built houses of ancient Tongan
[461] style was probably greater. Today, three men plait up to 200 meters
of coconut-fiber cord in four hours (as a day's output). In this
way three people can, in three months, make the necessary amount of
kafa for a rather large house of ancient Tonga style, whereas they
finish this work for a small house in less than a month--if they
persist in plaiting their quota every day.

342 A further concern of the Tongan who wants to build a house in
313 the old Tongan style is to procure the posts and beams. The Tonga
[824] Islands are poor in lumber, and if a person does not have a few *koka*
[439]

373. *Bischofia javanica* Bl.

/140 cont./

342 trees (*Bischofia javanica* Bl.) or *toa* trees (*Casuarina equisetifolia*
313 L.) at his disposal on his plantation (bushland)--as in old times--
[824] and does not wish to sacrifice valuable breadfruit trees to make posts,
[439] then he must go to an uninhabited island where--again as in old ways--
he will look for suitable trees, or else he will buy imported Canadian
or New Zealand building timber which, moreover, is preferably used
342 instead of coconut palm trunks for the beams. To build a house in old
177 Tongan style, which is supposed to have board walls and be covered
439 with corrugated sheet metal, and especially to put up a European-style
construction, a person must, in good time, buy enough corrugated metal,
imported wood, nails and possibly cement in the commercial centers of
the Archipelago and transport them to his native island in the small
cutters.

342 /141/ Since a man must generally supply food for the specialist
264 (in case such a one is building the house) and all his helpers (other-
574 wise the orderly course of the work might easily be endangered as a
result of growing apathy), he must, in due time, raise quantities of
food plants and, in addition, depending on the size of the understaking,
fatten a number of pigs. If a man does not wish--or is not able--to
offer hospitality in this ancient Tongan style, he must have in read-
iness sacksful of flour and sugar, large cans of corned beef, tea and,
if possible, loaves of bread, in order to provide meals.

342 After all preparations have progressed to the point where they
331 can guarantee a steady flow of work, the day is set for the building
to begin. The work force assembles on the day announced; the work
begins.

The following account of the building of a house in November/
[177] December 1951 on Nomuka may show the juxtaposition (or fusion) of old
[178] and new:

/141 cont./

342 For a long time the "district officer" /cited in English/
177 living on Nomuka has wanted to move out of the house of his parents-
178 in-law and build his own house on a property he owns in the village.
463 He talks over his plan with Vilingia, the (approximately 45-year-old)
331 house-building specialist on Nomuka, who has been trained in Fiji
as a carpenter. They decide to build a house with ancient Tongan
ground plan but with "improved beaming," wooden walls with a cement
base, windows and doors and a corrugated sheet metal roof. Vilingia
draws a construction plan in an exercise book. The district officer
(439) buys four metal drums of cement, Canadian building timber, corrugated
sheet metal and nails, flour, fat and sugar in Nuku'alofa and has the
supplies brought to Nomuka in cutters. Six men from Nomuka sail to
(484) the uninhabited island of Tonumea, a half-day's journey distant, there
(313) chop down 12 breadfruit trees, cut them up as beams and take them
(283) home. Coconut-fiber cord is also made in sufficient quantities. After
all the material has lain ready for several weeks, the district
officer decides to start the building. Shortly before the date fixed,
(251) a group of natives sail to the neighboring island of Nomuka Iki,
there shoot one of the half-wild cows of the "boss," cut it up properly
and, in Nomuka, salt down the meat in wooden tubs, under the supervision
of an aged Tongan.

342 On the day the building is to commence, some 20 men from the
476 village (young and old in approximately the same number) assemble early
313 in the morning at the previous dwelling of the "boss," and, after a
331 breakfast of fried cakes /cited in English/ (Tonga: keke) and
orange-leaf tea, they repair to the plantations, led by the carpenter
Vilingia, where, because of the exalted position of the "boss," they
take the liberty of selecting and cutting down the coconut palms
needed for the rafters, without asking permission from their respective

/167 cont./

241 the old tidiness on the plantations must be noted. In the matter of
178 transporting the harvest, finally, ancient Tongan methods and thoses
177 resulting from European influence are approximately equal.

Tongan agriculture has undergone no fundamental change, since European influences were not strong and intensive enough, and since the natives themselves felt no necessity to change their traditional, time-tested system.

241 The efforts of well-meaning Europeans to "improve" and change
177 Tongan agriculture were very numerous in the past, but did not become
permanent because of the brevity of individual visits of sailors and
researchers. At the present time, officials of the British protector-
ate authority seem uninterested in intensive efforts to influence
241 native agriculture. The two Europeans (an "agricultural officer"
563 /cited in English/ and his coworker) working for the Department of
177 Agriculture /cited in English/ in the more or less independent Tongan
647 government are limited in their effectiveness since they are dependent
on the wishes of the Tongans and are also handicapped by a shortage of
personnel; moreover, the agricultural officer has frequently been
replaced, and every successor has tried out a new program (439)

> 439. At present, the Department of Agriculture finds it most important to improve cultivation (increase yields), to determine the variety of crops most suitable for the particular soil and in future to develop possibilities of fertilization (perhaps bring phosphate from the islands of the Archipelago which are difficult to access, namely, Hunga Tonga, Hunga Ha'apai and 'Ata).

177 /168/ and a new system or work. Nevertheless, through the work of
563 white government officials a good copra export (440)

> 439 440. See footnote 533, p. 304.

and a good banana export (441)

/168 cont./

177
563
439 441. In 1951, for example, more than 74,000 crates of bananas were exported to New Zealand from Tongatapu and Vava'u.

have been started.

241
178 For the Tongans, their old crops and agricultural methods suffice. As in old times, the individual scarcely specializes in certain crops. The same things are generally planted on all the islands. With their customary plantation work, to which the Tonga cling conservatively and which, after all, produces good yields for a limited amount of work, they are fully occupied, according to Tonga notions, and not much inclined readily to adopt proposals for innovations. Moreover, [137] the plants introduced by Europeans were often set in suitable soil and, above all, the very careful maintenance that is often required does not seem feasible to most Tongans.

231 b) Animal Husbandry

In ancient Tonga, pigs and chickens (442)

442. See G. Forster, loc. cit. V. p. 150.

231
136
177 were the only domestic animals. Even today, they are still the most useful animals for the natives, even though, since the second half of the 18th century, Europeans have made numerous attempts to naturalize other domestic animals in Tonga. Only the horse was able to achieve a certain importance, since it proved very useful as riding, pack and draft animal for transportation to the distant plantations of some of the villagers. Cattle, goats and ducks are kept by only a few natives, and the importation of sheep and geese was quite unsuccessful. Cook probably brought the first dog to Tonga and it was brought from Fiji at approximately the same time. (443)

443. See J. Cook, Beschreibung...loc. cit. p. 233.

231 Today, one may probably come across dogs in all Tongan villages, though they are not regarded as regular domestic animals by most natives.

/171 cont./

231 492 transport to the village their tubers, coconuts and other plantation products in a sack or coconut-leaf basket that lies crosswise in (493) (177) (422) front of the rider. The owners of European two-wheel carts (455) can bring heavy loads home with their horses; the harness consists of a leather collar, a wooden back yoke /?/ /Ruckenbugel/, iron head harness and lines; a twig serves as a whip. (262) Sometimes they also slaughter horses which they like to eat occasionally.

455. In the various villages, some one-eighth or one-fourth of the households own such carts.

231 The Tongan makes horse-raising very comfortable for himself. There are no stalls or enclosures. He tethers his horse near his house in the village, so that it can graze, or he ties it to a tree on the plantation where it can find its food. Water shortage makes it necessary to lead horses specially to watering places, which is not always easy. On the plantations horses often cause considerable damage, especially if they break away. The Tongan does not know how (492) to look after horses and groom them. He often continues to use them as riding and pack animals even when they have open wounds on their backs as a result of improper treatment.

● (439) The horses imported mostly from Australia and New Zealand are said to have decreased after a few generations, probably because of changed living conditions.

Cow:

(136) This domestic animal repeatedly introduced to Tonga by whites has to this day not become prevalent or of importance on the islands. Very few natives keep cattle, which are chiefly thought of as furnishing meat; cows are not milked. The animals are tethered on a rope on the plantations, so that they can find their food within a circumscribed area. Sometimes the natives lead them to a watering place, but they also leave them a few days or even weeks in one place,

/172 cont./

Cat:

231 [136] Cats, which were likewise brought to the Archipelago by whites, are kept only now and then by natives to protect their supplies from mice. In the bush, wild cats occur now and then.

[178] To sum up, we may say about animal husbandry that, as in old times, there is scarcely a Tongan household without domestic animals and that, as in those days, the pig and the chicken are the most important domestic animals for the natives. On the other hand, of course, the limited size of the islands, the small size of the individual property and the lack of water are reasons why no more extensive animal-breeding, especially of cattle, arose. On the other
231 hand, the reason why the change from their former circumstances is
178 but slight may be found in the Tongans themselves, who apparently feel no necessity to alter their traditional economic system which is quite sufficient for their needs; in their raising of domestic animals--which might almost be called extensive--/173/ they leave a great deal to chance and shy away from the trouble which profitable pig and chicken raising, and especially systematic cattle raising (which is to a small extent possible even on 8½ acres) entails. The
[262] Tongans do not recognize the advantage of a better meat supply and the
[272] use of manure, or else these advantages do not seem to them worth-
[237] while, and the prospect of milk is not at all tempting for most of them, (457)

[439] 457. Imported, sweetened condensed milk has had a limited distribution in the Archipelago, which is probably due to the fact that the Tongans are very fond of sweets and that, in their eyes, this canned milk is very different from fresh cow's milk.

just as they do not care for eggs.

/179 cont./

226 though it has by no means displaced them. Even now, for example,
177 the casting net (kuenga sili) is still, as in old times, (463) a very important piece of fishing gear, especially among the Ha'apai group. Among the ancient Tongan fishing methods, however, bonito fishing (from a boat with bamboo pole, tow-line, hook and fiber bait) (464) has disappeared.

227 A change took place, chiefly with respect to the material used
286 for making the fishing gear. With the exception of tuki (see above
177 under /180/ uloa), no fish net in Tonga is today knotted of indigenous
178 material. (465)
(824)

[439] The natives use imported European twine which can be bought from
227 shopkeepers on most of the islands. Now and then they even acquire
177 ready-made nets in the department store of the chief towns. Most fish nets nowadays have weights made of lead instead of the traditional coral-stone sinkers; they buy the lead from merchants, heat it and pour it in the shape of a plate which they cut into small pieces that are bent into tubular shape and used as weights around the edge of the cord of the net. The natives prefer lead sinkers because they are
227 heavier than coral stones and make handling the net easier. The float,
178
824

226
178
463. See J.J. Labillardiere, Relation du voyage... /Account of the voyage.../ II. p. 113/114; W. Ellis, An authentic narrative...I. p. 109; Th. West, Ten years...

464. See J. Cook, Beschreibung...loc. cit. VI. p. 286/287; J. Martin, loc. cit. II. p. 342/343.

465. Formerly, the bast of the olonga tree (Tonchaedia) in particular (see J. Martin, loc. cit. II. p. 279), coconut fiber cord (ibid.) and the bast of the fau tree (Hibiscus tiliaceus) (see Th. West, Ten years...p. 119) were used for net knotting.

226 /182 cont./ As in all
[178] areas of daily life, the commoners here too enjoy greater freedom than
[565] they did in the past. Fishing has largely remained a secondary
226 occupation (secondary to farming),, though there are some ardent fish-
463 ermen among the natives, a few of whom (478) pursue it as their main occupation. However, there has never been a definite specialization or systematization. /183/ One does not meet any Tongans who carry on fishing as a regular business; rather, the natives go about it in their traditional casual-calm way. (479)

226 The strange situation that the Tonga Islands, some of whose waters have
177 a great abundance of fish, today import rather large quantities of
439 canned fish, (480)
556
181 may be explained by the fact that the Tongans are fond of fish prepared in the European way; largely to blame for this development, however, are the commercial interests of Europeans, the present "wealth" of the natives as a result of their copra production, as well as the laziness of the Tongans.

d) Food and Luxuries

Food

262 The ancient plants cultivated in Tonga (yams, kape, sweet potatoes, taro, bananas), together with various ancient indigenous tree fruits (especially coconuts and bread fruit) and fish (and mussels, octopus,

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478. See "the landless ones," p. 178.

479. Although, in the Ha'apai group where fish are plentiful, one can easily fish "from one's front door," as it were, the natives do not by any means make regular use of this possibility. Nor is it rare for natives to return from fishing on the high seas without fish because they have already consumed them on the way.

480. In 1951, for example, 15,912£ T. (C.Z.F.)-worth from South Africa, Great Britain, Norway, New Zealand and Australia.

/191/

252 [343] [178] The Tongans prepare their food as in old times in (or near special cook huts (485)

485. See pp. 93-94.

on their properties; nowadays, meals are sometimes also prepared on the plantations if these are more distant from the villages. The natives use various methods. Most often they cook in pots. The Tongans erect simple hearths of stones or old corned-beef cans and iron rods laid over them. On this they set an iron pot or kettle, or an empty zwieback can, in which the food is cooked, while the fire underneath the container is fed with coconut husks and shells as well as firewood. Cooking (haka) in pots is most probably not an ancient Tongan custom. But for a long time the islanders have obtained clay pots from the Fiji Islands,

252 415 177 [372] [439]

486. See J. Martin, loc. cit. II. p. 284.

A century and a half ago they also began using iron pots which they obtained from European ships; (487)

487. Ibid.

however, it has only been in the past few decades, with the commercial development of the South Seas, that cooking in pots has become the predominant custom in food preparation. 252 The characteristic Tongan way of preparing food is to stew it in the earth-oven. This is more work for the natives than boiling, but it is still often practiced even for everyday cooking (especially on the smaller islands); on Sundays, festivals and other special occasions, preparing an earth-oven is taken for granted in most Tongan families.

A typical, carefully prepared earth-oven ('umu) in Tonga is today put together in the following way: In the village, inside or next to their cook hut (or, if a meal is planned on the plantation, on a place there) the natives dig a circular hole, the size depending

/194 cont./

252 178 were then ultimately eaten or baked in this state, has almost completely fallen into oblivion. This may be attributed to the fact [177] that today imported foods are available on all the islands of [439] the Archipelago and that therefore stockpiling (for periods of shortage as a result of drought or storms) seems unnecessary. The fish that are caught are sometimes eaten /195/ raw, as in former times, (501)

501. See J. Martin, loc. cit. I. p. 197.

sometimes roasted in embers (ashes) or they are stewed, wrapped in banana leaves, in the earth-oven. (502)

[251] 502. Occasionally, they also preserve fish(for example, the 'ava on Nomuka), by cutting them open, cleaning them, salting them, hanging them up in the sun (with small sticks wedged into the fish to keep the two halves apart) or laying them out on platforms and then smoking them; octopus also often dried among the Ha'apai group.

Fish broth (with coconut milk) is still quite popular, as it was in ancient Tonga. (503)

503. See J. Cook, Beschreibung...loc. cit. VI. p. 161; J. Martin, loc. cit. II. p. 285.

231 The natives generally slaughter pigs and chickens as in olden times by stunning them; (504)

504. See J. Cook, Beschreibung...VI. p. 228; J. Martin, loc. cit. II. p. 282/283.

[177] larger pigs are shot. Nowadays they occasionally also slaughter animals according to the Jewish rites.

252 177 Among European foods, canned corned beef has gained special significance. They eat the meat either without any further preparation, or they heat the cans, but they also stew the corned beef in the earth-oven together with tubers by wrapping it in banana leaves and adding

/195 cont./

252 coconut milk; less frequently they fry it in a pan with onions (and
177 tomatoes). Rice, which is very popular but not always easily obtainable,
[439] apparently because of importing difficulties, is boiled in water with coconut milk and sugar added. Likewise, on the smaller islands, some natives know how to bake cakes in English fashion; they are made (only for special occasions) of flour, sugar, baking powder, creamed butter and bright yellow coloring. A few Tongan women also know how to make an English pudding with flour, shortening, sugar raisins and baking powder. Almost everywhere one finds the dumplings (topai) cooked in water and the very popular fried cakes (keke) that consist of a flour dough with baking powder and are fried in pans, usually with imported shortening. On only a few of the more important islands (Tongatapu, Vava'u, Lifuka) white bread is today baked by Tongans in simple, self-built ovens; this is so popular that the demand constantly exceeds the supply.

271 As beverages the Tongans use chiefly collected rainwater, as well
272 as the fruit water of young coconuts, as in the past, (505)

505. See J. Cook, Beschreibung...loc. cit. VI. p. 288; W. Ellis, An authentic narrative... I. p/ 97.

312 at any time during the day. The water supply of the natives has been
177 improved during the last decades, with cement tanks (506)

506. From imported cement, sand and coral stones.

replacing the ancient Tongan "water pits" (lepa), (507)

507. See E. W. Gifford, Tongan Society, p. 178.

being built by natives on their own initiative or by order of the government; /196/ these /tanks/ catch the rainwater running down from the corrugated metal roofs of private dwellings, schools, administra-
312 tive buildings and churches. In addition, the natives on many islands make an effort to dig pits which furnish more or less brackish water.

276 261 262 272 273 /198 cont./

chewing gum and candy, tea, coffee and cocoa, and finally alcoholic beverages.

276 574 Of all these luxuries, kava alono belongs to ancient Tonga. Since kava drinking for most Tongans is a purely social event, it was already discussed in connection with the description of village life. (519)

[178) It merits repetition to say that today kava dominates all social life on the islands of the Archipelago at least as much as, if not more then in the past.

276 [797) /199/ For more than a century the Tongans have been familiar with the use of tobacco, (520) and though the missionaries at first fought bitterly against this "vice," today by far the majority of adult natives of both sexes smoke. The 276 177 439 younger Tongan men and women and those of middle age smoke imported English tobacco almost exclusively. They have become quite choosey about its quality, since several different brands are imported. Using a two-ounce packet of tobacco, they generally roll 60 (thicker) or 90 (thinner) cigarettes (using cigarette papers that have likewise been imported). Girls and women are just as skilfull as the men in rolling the cigarettes freehand. Imported cigarettes, which are obtainable in sufficient quantities and are not much more expensive than the "prime cost" of the self-rolled ones, are seldom smoked.

276 887 178 Old people (men as well as women), however, still prefer the

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519. See p. 144 ff.

520. See Ch. Wilkes, Narrative.../cited in English/ III. p. 26.

521. Ibid., p. 26/27; O. W. Brierly, Brief geographical sketch.../cited in English/ p. 117.

/200 cont./

262 432 sour and sweet hard candies, which, like chewing gum, may be obtained from shopkeepers on most of the islands.

272 432 Tea, coffee and cocoa, though they may be bought today on many islands of the Archipelago, have not attained great importance for the Tongans. (522)

522. See chapter on "Food," p. 275 ff.

273 [439] [656] The natives cannot easily obtain alcoholic beverages (kava papalangi). Limited amounts are probably imported, but only a few Tongans have the required permit from the minister of police that entitles them to one bottle of spirits per month. On the black market the natives obtain only very small quantities of alcohol. [177] Various Tongans have become experienced in making alcoholic beverages (using, for example, sugar [or artificial honey], yeast and pineapple), especially through their contact with foreign troops on Tongatapu [687] during the second World War. But this illegal production that can be punished by imprisonment has heretofore been proportionately small, chiefly around Christmas time, and of late it has become insignificant.

276 177 Thus, European influences in the area of luxuries have brought about a certain change, chiefly through the importation of tobacco. But, although most Tongans enjoy smoking, they have not become so addicted to tobacco that they are actually dependent on it; (523)

523. For example, on the small islands, shopkeepers often run out of tobacco, and the Tongans who then lack smoking supplies usually bear the time they must wait for a new shipment with equanimity.

this is, of course, also not the case with the other new and less important luxuries.

C. Copra Production

245 177 Copra production (524)

/203 cont./

245 the same throughout the year, since the months in which more nuts fall
433 (summer) they are usually not all gathered, whereas in the periods of
rather more scarcity (winter and the dry seasons) the natives seem
245 concerned about every nut. On a plantation of 8½ acres an average of
433 approximately two tons of copra may be produced in a year; since the
434 price paid by the Copra Board for A-quality was, for example, 62£T.
[435] per ton in 1952, the owner of such a plantation was able to earn
about 124£T. (or about 1170 German marks) that year for his copra, if he delivered the best quality. The plantations that are available to individual families, however, differ in size, (528)

528. See p. 173 ff.

so that the profit in terms of money from copra production fluctuates very much among individual households, and at present amounts to perhaps 30 and 300£T. annually. (529)

529. In 1952 in the Vava'u group, for instance, every household made an average of 170£T.

245 Moreover, the price of copra constantly rises and falls on the world
435 market, (530)

458 530. Before the second World War the price paid
434 for one ton of copra in Tonga dropped to 4£T .

so that the Tongans, with their heavy dependence on copra production as their most important source of money, have experienced "rich" and "poor" periods during the past decades. Nonetheless, with the money
439 they receive for their copra production the natives are able to buy
177 various imported goods which contribute in some respects to a change
511 in their material culture as compared with the past. Most of these
goods are not vitally necessary for the islanders, for today all Tongans can still support themselves solely by means of their agriculture (along with their fishing and domestic-animal raising). Since the quantities of bark cloth and mats that were made in the

511 /203 cont./ Since the quantities of bark cloth and mats that were made in the
439 Archipelago have long since ceased to be used for clothing, as a re-
177 sult of European influence, but only for the sleeping places and
291 for festive occasions, the natives are obliged to buy fabric for
651 clothing or readymade clothing; (531)
794

531. See chapter on "Clothing," p. 67.

they must also pay the relatively low taxes and make substantial
511 contributions to churches. Aside from that, all money--and this is,
439 as a rule, the larger part of the proceeds from their copra work--
177 /204/ is used to buy supplementary European amenities. Among these are, first of all foodstuffs such as canned meat and fish, flour, sugar, etc., luxuries, above all tobacco, furthermore household objects such as lamps (including oil), dishes, bowls and pots, equipment, raw material and tools for building, fishing and woodworking, and finally things which for the Tongans are definite luxury articles, such as bicycles and cabinet-type sewing machines, perfume and powder.

245 Thus copra production has exerted a certain influence on the
434 daily life of the Tongans. The whole family takes part in this work--
(592) at any rate, in some phases of it; the men devote many hours of the
[461] year to it. The money they make with this activity is largely con-
(439) verted into goods that change the external picture of Tongan culture--
(177) from clothing and food to house-building and household goods; money and goods also affect the character of the people and their interrelations--though up to now only to a slight extent. (532)

532. See pp. 17-22, 29-31.

[439] For the Tongans state the duty on the export of copra and the import of goods that results from this is the most substantial source of income. (533)

533. See Colonial Office, Report on Tonga for the years 1950 and 1951 /cited in English/. London, 1952. p. 8/9. Copra export rose to

245 /204 cont./

> 434 16,704 tons in 1950 and to 19,222 tons in
> [439] 1951 (ibid., p. 12); only a few white
> planters are included in these amounts.

245 Finally, the fact that the Tonga Islands, through their copra produc-
433 tion, have become a member (though a small one) of world economy is
439 having a certain political, commercial and, above all, economic
importance for the natives, depending on the state of the world
market.

245 Yet the possibility of producing copra is too limited on the
433 islands, and the traditional economic and communal system of the
182 Tongans is too closely knit, and the people themselves are too even-
178 tempered for this to lead to the destruction of the traditional life
177 of the natives. The old, basic economic structure has remained.
Copra and money have become an essential attribute to their former
way of life, but still only an attribute that can be renounced,
though renunciation would bring with it all kinds of hardships.

D. Plaiting, Knotting, and Tapa-Making

285 Most Tongan women even today spend a large part of their time
[462] plaiting, knotting and making tapa.

/205/ Among the plait work, mats are particularly important on account of the labor involved in making them and their significance for Tongan daily life as well as for festivities. The following types may be distinguished: floor mats, seat mats, sleeping mats, belt mats and display mats; the "pola" plaited of coconut palm leaves, which are used to make walls and to cover roofs, are also to be mentioned here. Some of the mat types--because of various raw materials and different ways of making them--must be further subdivided into individual types. The following list may give a picture of how the most common Tongan mats are used and made:

/208 cont./

000 above under ta'o-vala kie).

kie Tonga:

285 This likewise very valuable mat, today the most finely plaited
292 in Tonga, is popularly worn by bride and bridegroom at their wedding
[585] and also occasionally as a ta'o-vala at important church services and
[565] festivities. A commoner will not wear it when he visits a headman
(in order not to elevate himself), but the nobles themselves may wear
[422] it at all times. In the various villages only a few natives own such
285 kie Tonga. Even today, as in the past, (536)
178 such mats are bought from Samoa where they are made even better and more
exquisitely; however, the difficulties involved in procuring these in
particular are too great to make possible a general distribution in the
Archipelago.

285 The material for these mats is also the lou kie species of
824 pandanus (see above).

6. Various Mats

285 pola:

By "pola" the Tongan means the coarsely woven halved coconut
[824] palm leaves of specific (rectangular) shapes that are plaited for
[342] various purposes. They are used for the many sections of walls and
roofs of ancient Tongan style dwellings, as well as for the "mat
doors" put together out of several pola. The coconut leaf mattings
(pola kai) (537) on which festive meals are served should also be mentioned here.

fala tuki kava:

This special mat serves as a pad on which the kava roots are

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439 536. See J. Martin, loc. cit. I. p. 162.

537. Two joined, coarsely plaited halves of coconut palm leaves.

/213 cont./

285 i fulu fulu 'i moa:

[293] This is the typical "good" fan of females, especially girls; they like to use it in public, in church, at choir practice, etc.

[462] Women and girls plait it of pandanus strips of the lou tofua
[824] variety (as well as lou paongo); (564)

[531] 564. See pp. 306-308.

according to the old style, they work in lou tofua strips dyed black or tinted (for example, crimson) with European dyes. A wooden handle is
[237] plaited in as reinforcement, and the entire edge of the fan is trimmed with white chicken down.

/214/

i lou fau:

[462] The i'lou fau is used mostly by women, but also by men, and is made by the former.

[824] They use the midribs of the pinnate leaflets of the coconut palm, leaf strips of the lou tofua (or lou kie) variety of pandanus and
[177] hibiscus bast (fau). The latter is usually colored with European dyes.
[386] A wooden handle is plaited in as reinforcement. Sometimes they also
[237] fasten chicken down to the edge of the fan.

285 Without doubt, these are products that are basically of ancient
[177] Tongan origin. In the absence of comparative material it is difficult for us to determine how great the change is in this area. In any case,
[439] the frequent use of European dyes, as well as the bits of imported construction timber used to reinforce the handle are recent influences.
[178] Probably the more "elegent" fans (for example, i fulu fulu 'i moa,
[565] i tu'a niu) were reserved for nobles in ancient Tonga, and in general we may assume that the work has perhaps become cruder.

Finally, in a discussion of Tongan plaitwork we must mention sandals and hats.

/239 cont./

463 (or wages); the congregations pay their clergymen; and workmen are
465 paid in money for their services, by nobles as well as commoners
178 (or else their work is acknowledged with good food); in business,
finally, /240/ Tongan employees are also paid, while the independent
merchants earn money through sale activity.

463 Vocational specialization, however, is only a complementary
force in the general economic life. It is far from dividing up the
population into various professional groups. Almost all Tongans still
master the tasks needed for life on the islands. (639)

639. That is to say, agriculture, fishing, simple house-building and boat-building, domestic animal raising and copra production; the women today also generally know how to sew articles of clothing.

441 Businesses were unknown in ancient Tonga, if one means by business
178 an independent activity continuously practiced with a view to
economic gain.

Today there is business activity, in this sense in the Archipelago,
[181] but relatively few natives engage in it. In general, the Tongans
lack a sense of acquisition. For instance, when white visitors arrive
439 with the monthly steamer in the ports of Nuku'alofa and Neiafu,
the natives, even in these "urbanized" settlements, do not offer to
sell them handwork (baskets, mats, fans, tapa, etc.), (640)

640. A recent exception are two natives who make tortoise-shell jewelry (rings, bracelets with silver inlay) specifically for this purpose (as handicraft).

and Europeans often have the greatest difficulty in getting a coveted "souvenir"; /cited in English/ usually they depart without such handicraft. (641)

641. Conditions on Niue Island (about 300 sea miles east of the Tonga Archipelago) are just the opposite.

/242 cont./

436 (not so much English, New Zealand and Fiji) silver and copper coins in circulation. The bank notes in circulation on December 31, 1951 amounted to 175,683£T. (645)

645. Colonial Office, Report on Tonga for the Years 1950 and 1951 /cited in English/. p. 11.

Tongan money--though made of paper--is regarded as a positive measure of value, not only by whites, but especially by natives, even on the smallest islands of the Archipelago. The government pays with it, its civil servants and employees; the Copra Board buys copra made by the natives with this money; the Tongans pay their taxes with it, do all their shopping at storekeepers with it, and even like to use money in the villages on the small islands to buy a house, for example, or a boat. The present economic life of the Kingdom of Tonga (including all imports and exports) would be unthinkable without the presence of money. It still seems necessary, however, for a
[563] white man to fill the post of minister of finance and supervise the
[645] regulation and security of Tongan currency. Owing to this European
652 influence, and especially to the favorable economic conditions of
436 the Kingdom of Tonga, the currency as well as the entire national
[177] budget are quite sound; the country is without debts and in 1950
[454] 424,808£T. were even invested abroad. (646)

646. Report of the Honourable the Minister for Finance for the Year 1950 /cited in English/. Nuku'alofa 1951. p. 2.

434 The average Tongan earns his cash chiefly from copra production; the annual income from this aimed at by most families /243/ is today probably somewhere between 30 and 300£T. (647)

647. See p. 302-304.

[439] In addition, in the chief towns, there are limited opportunities for
[432] earning money through banana export and the sale of watermelons and
pineapples.

/243 cont./

426 436 give it back, the creditor will not be much concerned and will regard
178 the matter as settled, in accordance with the old Tongan custom.

436 There is no doubt that the natives have learned to value money
434 and like it, but even the present high copra prices have not led to
a "copra intoxication" and /244/ a "money fever." They often give away
[431] whole loads of coconuts, and in the Copra Board in Neiafu, for example,
it was observed in 1952 that the Tongans who could not be paid the
full copra price as a result of a temporary shortage of pence coins,
did not come back even after several weeks to pick up their three-or
ten-pence.

—454 For most of the natives the idea of saving, in the sense of a
436 continuous accumulation of sums of money, is unfamiliar. About
four decades ago many families were said to have saved relatively
large sums in order to build. At that time several of the European-
type frame houses were erected. Today large objects such as
[428] dwellings, cement tanks and carts have often been inherited, and money
[432] is spent on clothing and food and other European goods. Given the
[439] normal demand, the to some extent, artificially produced demand by
434 the shopkeeper's promotion, and the relatively high prices, money is
436 soon spent in a large family.

436 Though the majority of Tongans do not use money purposefully
454 (in the European sense), there is nevertheless no dearth of examples of
472 deliberate management of money after the manner of whites. Thus, for
example, F.S., a Tongan shopkeeper on Nomuka, through carefully considered management, within nine months (1951/52), increased his capital
from 61£T. to about 800£T. and the two aforementioned truck drivers
as well as the lemonade seller on Lifuka (648)

648. See pp. 361-364.

[181] may also serve as example of a wise use of money. These natives,

/301 cont./

175 discovered the most important islands. In 1792 he returned and
177 extended his discoveries. In 1793, D'Entrecateaux saw one of the
Fiji Islands, in 1794 Captain Barber touched the Archipelago. In
1797 Wilson, with the "Duff," passed through the group and in 1799
Captain Bentley caught sight of a few of the islands.

All these seafarers of the 17th and 18th centuries had scarcely
any contact, or none worth mentioning, with the natives; they had no
particular interest in this Archipelago with its dangerous reefs, and
their voyages had other goals. But then the situation changed abruptly.
175 During the early years of the 19th century sandalwood was discovered in
177 Fiji, and in one part of the Archipelago there was a considerable
439 onrush of ships, which, however, ceased after a decade when all the
wood had been cut down and carried away. But by that time some natives
had come into closer contact with Europeans. Seamen had traded with
the Fijians and, in order to earn their sandalwood, entire crews of
European ships finally took part in native conflicts. Shipwrecked
and run-away sailors entered the service of chiefs; throught their
help and introduction of muskets new powerful native states were
created in the decades that followed. A further result of this and
[164] later contacts was the spread of new diseases which, throughout the
[731] century caused appalling epidemics among the Fijians who did not yet
have sufficient immunity against them.

The sandalwood transporters were then followed by the ships of
whalers and American trepang-seekers, and at the beginning of the
thirties of the 19th century, traders settled on the shore of Levuka.
175 In 1835 the first white Wesleyan missionaries arrived, followed in 1844
177 by the Catholic Mission, and thereafter European influence gradually
797 began to spread over the entire Archipelago. As a result of the visits
of ships and the /302/ activity of "beachcombers" /cited in English/,

369 drinking and sanitation remains, at best, in a precarious balance
182 with growing urban population.

178 The process of urbanization has several causes which are
[179] significant in the framework of this research. Since the mid-1960s,
[171] the development of tourism, and its associated activities, have
been stressed in the developmental plans of all island governments
in the Southwest Pacific. This has had two immediate results in
178 Tonga. First, many individuals within the agricultural sector of
166 the population have given up their subsistence agricultural activi-
369 [464] ties and moved into urban centers hoping to secure cash employment
in handicraft or tourist related activities. This is particularly
178 the case in Nuku'alofa, Tongatapu and Neiafu, Vava'u. This movement
369 has not only rapidly increased the urban population but has also
433 decreased the total acreage in agricultural production, or changed
[241] production from food crops to cash crops. Others of the rural
population, who remain on their farms, often devote increasing
amounts of time to the production of craft items. However, because
of the rate of expansion in Tongan population, total rural population has continued to increase. Therefore, as rural population
continues to grow, agricultural food production is decreasing and
urban population is rapidly expanding.

369 The second important result of urbanization, without con-
178 sidering the social and cultural impact, is the growing reliance
439 upon imported foods and urban oriented materials (Horine 1967,
p. 43). As urban population increases and agricultural production
of foodstuffs proportionally decreases, food imports become necessary.

439 Many, though not all, of these imports are of little nutritive value
262 and may be actually detrimental to the health of the people. In
262 Tonga, for example, a recent French survey of the capital city
178 revealed a dramatic increase in the consumption of high energy
273 foods, such as sugar, alcohol, and highly processed foods. As a
178 result, the French study concluded, there was a rapid rise in the
164 incidence of dental caries within the Tongan population, accompanied
146 by a general decrease in the overall nutritional status, especially
among preschool children (Hansell 1962).

439 This is not to imply that all food imports are of little
262 nutritive value or that Tonga should strive to achieve self-
000 sufficiency in food production. However, it is clear that some
form of control, governing the quantity and quality of certain
foods, should be considered. Such action should be aimed at
improving the quality of imports, including flour, meats, and
grains. Consideration of the nutritional status of urban populations is advisable in view of the rapid expansion of this population segment and the increasing utilization of imported foodstuffs.

178 The economic shift of the populace is another major cause
369 of urbanization. This shift has been most notable in the agricul-
178 tural sector of Tonga's national economic structure. The effects
369 upon agriculture are felt in two significant areas. As alternatives
241 to agriculture are found in cash employment in urban areas, the
[439] cash income of the people involved increases and imported foods,
[262] often seen as status symbols, are sought as such. Therefore, the
per capita urban demand for indigenous foodstuffs tends to decline,

178
369 if imported foods are available and cash is on hand with which to
241 purchase them (Horine 1967, pp. 43-46). In addition, as the pos-
439 sibilities of cash employment in urban areas increases, the popula-
[262] tion is less inclined to work their traditional urban gardens.
Rather, they prefer to raise their visible socioeconomic status
through the use of imports. This subsequently reduces further the
amount of foodstuffs produced in the nation.

241 In rural areas of Tonga, major portions of the remaining
178 agricultural sector are changing to a cash orientation. The govern-
241 ment requires a substantial portion of a farm holding to produce
439 export products (or at least be planted in such), principally coco-
245 nuts or bananas. However, many farm plots are totally devoted to
the production of crops for export (Kennedy 1961, p. 61). Major
cash crops include copra and sweet banana, which together account
241 for 80 percent of Tonga's exports. As is the case in urban areas,
178 as the cash income of farmers increases, the incentive for producing
agricultural food staples decreases. This situation will probably
continue as long as market prices for Tongan exports remain high and
the status associated with material products, including imported
foodstuffs, exists.

121 Therefore, one may hypothesize that as Tonga's population
continues to increase, urbanization will increase, agricultural pro-
duction of foodstuffs per person will decrease, the dependency being
placed upon food imports will continue to grow, and the nutritional
status of particularly urban populations will probably decline.

423 expressed by landowners, as well. However, only 0.3 percent of the
829 sample expressed the opinion that the tenure system should be
reorganized. Though this appears to be contradictory, most informants, when pressed on the issue, implied that the land tenure system was based on tradition, and would not change.

511 Considering these features of the system, the following conclusions may be formulated. Although landlessness exists on a large scale throughout Tonga, few landless households suffer critical hardships resulting from land shortage. Most landless individuals consider their income sufficient for household needs. An occasional landless family enjoying remittances from abroad or who derive income from fishing or labor may even achieve an income level above that of the average allotment holder.

121 Land tenure must also be considered in terms of its role in
the nation's agricultural economy. Although an in-depth analysis of
Tongan agriculture is contained within the following chapter, its
relation to land tenure can be considered within the framework of the
[457] present section. The major issue which arises is that concerning
the basis for the development of cash cropping, which is vital to
Tonga's balance of payments.

241 Cash cropping has been largely confined to the production of
245 bananas and cocnut products. This does not mean that other cash crops
245 are being rejected, owning to land tenure. At the present, several
attempts are being made to develop the cultivation of vanilla and
● [439] citrus as cash crops. Nonetheless, the great majority of export

245 439 capital earned by cash cropping is the result of banana and coconut product sales.

245 423 Prior to 1965, the slowness with which allotments were registered and the incomplete subdivisions of larger landholdings hindered the expansion of both the banana and coconut crops. Many informants expressed a reluctance to plant their land with such long-term crops as coconuts, until their allotments were registered 245 with the Ministry of Lands, and their tenures secure. Large scale banana production was postponed for the same reasons. Under these circumstances, the cultivation of short-term food crops has been conducted on land often sparsely planted or devoid of coconuts. [654] Since 1965, and the initiation of the Coconut Replanting Scheme, a major effort supported by the government, a marked increase in the area planted in coconut palms has resulted. This, in turn, has 241 encouraged some farmers to cultivate bananas also. Therefore, it 245 appears that the basis for developing cash crop agriculture, within the present land tenure system, is sound. However, expansion will likely fail to meet its potential unless the tenure system is strictly applied and implemented, as stated in Tongan law and theory.

241 433 According to survey respondents, the single major limiting factor to increasing agricultural production is the lack of land. Many farmers expressed a willingness to increase production, if land 241 was made available and secure to them. Assuming this willingness to 423 433 be reliable, the tenure system limits the average farmer to eight and

CHAPTER V

AGRICULTURAL PATTERNS

The Traditional System

241 Economically, Tonga is supported primarily by agriculture.
433 Production of primary agricultural products accounts for approxi-
[464] mately 65 percent of the nation's employment and the majority of
[439] all export earnings (96 percent in 1969). In addition to subsis-
[245] tence cropping, bananas and coconut are most frequently raised as
245 cash crops. Copra is currently Tonga's major agricultural export,
439 seconded by bananas. While the export value of bananas was greater
than copra in 1967 and 1968, the occurrence of diseases, which
affect the banana plant, permitted copra to regain its dominance.
245 Copra is expected to remain the major agricultural cash crop in Tonga,
during the near future.

241 Most Tongan men earn their livelihood as farmers, having
434 three basic production activities. Production of subsistence crops
for family consumption is the major concern of the majority of these
men. Additional production activity concerns crops for local sale
and crops for exportation to international markets.

463 Table 13 presents the major labor divisions within the Tongan
162 Kingdom. While only 66.5 percent of the male population is engaged
[241] in agricultural employment, recent surveys indicated that a majority
of the remaining work force are also part-time farmers, producing

241 Cash cropping (to be discussed in greater depth later in this
chapter) in the bush fallow system can be divided into long- and
241 short-term crops. The principal short-term crops include bananas and
245 a variety of melons, plus miscellaneous plants. Bananas, as
[244] described above, may be interplanted in the normal planting cycle.
Usually, banana cropping is continued for several years before a
245 plot is returned to fallow. Production from this crop is allocated
[262] to household consumption, or sold in local markets. Surveys encoun-
[438] tered only an occasional farmer producing bananas for the international
[439] export market. Subsequent interviews indicated several limitations
on this type of production, such as plant disease and inadequate
shipping facilities.

The most severe diseases affecting banana production are black leaf streak, bunchy top, and banana scab moth, the most serious being black leaf streak. Decreases in the production of exportable bananas since 1967, equaling 83 percent of the 1967 crop, have been attributed largely to this particular disease. Leaf streak is a fungal disease, characterized by a dark streaked appearance on the plant leaf (Plate 2).^A The disease, by decreasing the total leaf area of the plant, thereby reduces the plant's photosynthetic capacity. The results are smaller fruit, smaller numbers of fruit per bunch, or frequently the complete absence of fruit.

Banana bunchy top is a viral disease, also reducing the photosynthetic area of the plant. It is characterized in the field by the insequential order in which the plant leaves die and the bunched appearance of remaining leaves (Plate 3, p. 74).^B Bunchy top

A, B [Because of poor quality of reproductions in the original, plates have not been marked for a Category--Analyst.]

245 retards the growth and development of the plant, and terminates fruit production.

[136] Banana scab moth, most destructive during its larval stage, may cause damage ranging from simple fruit discoloration to total [242] destruction (Plate 4, p. 74).A DDT, which is frequently used to combat scab moth, has been ineffective in annihilating the pest.

241 245 [433] [439] The combined effect of these three diseases have reduced internationally marketable banana production by nearly 1.5 million dollars, representing approximately 30 percent of total agricultural export production since 1967. Farmers are increasingly hesitant to initiate large scale banana production, unless guaranteed assistance in combating disease and plant destruction.

245 505 Survey interviews also attributed decreasing banana production to inadequate shipping facilities. Frequently, harvested bananas are placed on a dock to await the arrival of transport 245 vessels destined for overseas markets. During this time, the fruit 439 becomes over-ripe, falling below export quality. As a consequence, [435] fruit originally priced up to $1.90 per case may be sold for as little as 40 cents. Because of this potential low cash return, 245 many interviewed farmers stated that large scale banana production was an unwise economic risk.

244 Commercial production of melons, especially watermelons, is also hindered by the inadequate scheduling of transport facilities to [505] overseas markets. Melons are also produced for Tongan markets, but [438] frequently earn only low prices, even when out of season.

[435] A[Because of poor quality of original reproductions, plates have not been marked for a Category--Analyst.]

249 Of the miscellaneous crops produced, two are particularly
[241] noteworthy--sugar cane and peanuts. Sugar cane is frequently produced
on the farms of Vava'u, although limited cultivation may be found
[257] throughout the nation. Sugar for domestic consumption is not produced
in the Kingdom, and mature cane is sold in small unprocessed sticks,
much like candy.

244 Peanuts have a great potential for expanded production in Tonga. The presence of a domestic market for peanuts is apparent throughout the Kingdom, and the potential dietary value of this product should be recognized. Employees within the Tongan Ministry of Agriculture blame the lack of extensive peanut production on the laziness of individual farmers. On the other hand, farmers refuse to plant peanuts without guaranteed aid for the necessary machinery and fertilizers.

245 Coconut is the best example of long-term cash cropping.
[439] Products of the palm, principally copra, equal approximately 85
[241] percent of Tonga's total international export. Cultivation of palms
is conducted independently of the food crop planting cycle. If
well cared for, young palms will reach initial production four to six
years after planting, although seven to nine years was frequently
reported in interviews as being the time required prior to production.
The coconut palm will produce for up to 70 years, with 50 to 60 years
[136] being the norm. However, rats and beetle damage claim up to 25 percent of all potential produce.

241 Palms are often not planted in an orderly fashion on a
245 typical 'api, being planted in a seemingly random distribution. An

241 An
245 aerial analysis of Tongatapu, and a subsequent comparison with
171 Western Samoa, revealed a marked difference in planting and cultivation. Portions of Samoa reveal an orderly planting configuration,
241 suggesting more devoted commercial production of coconuts. Tongan
245 farmers, when questioned about the uneven planting, noted that they can produce much larger tuber crop yields if sunlight is not blocked
245 by closely planted palms. However, loosely defined and enforced Tongan laws requiring palm cultivation, plus the desire for a cash income, have motivated an increasing number of Tongans to plant their entire landholding with coconuts.

245 It was noted in such cases that extensive coconut production
241 is accompanied by smaller gardens and less rotation of crops. This
[438] subsequent reduction of tuber food crop yields is compensated by the purchase of foodstuffs in neighboring village or urban areas. In Ha'apai and the more densely settled portions of Tongatapu, an occasional interviewee reported the necessity of planting entire land
[262] holdings in coconuts to insure a cash income. Increasingly, incomes
[439] from cash crops are providing households with diets of imported foodstuffs, replacing those of traditional crops.

The possibility of subsistence crop production in conjunction with coconut planting is largely dismissed by Maude (1970). While coconut yields can be temporarily improved by the occasional clearing of bush for gardens, the burning of the cut vegetation scars the palm and severely reduces production. In addition, once the planting cycle is complete and fallowing begun, vegetation is allowed to grow around the palms unhindered. This growth not only competes

231 TABLE 15.--Livestock Owned by Tongan Households: Sample of 265.

	Households Owning (%)	Mean Owned per Household	Range of Ownership	Total No. of Livestock Owned By Entire Sample
Horse	38	1.0	1-6	98
Cattle	12	4.0	1-12	124
Pigs	55	4.9	1-48	700
Goats	27.5	2.5	1-8	179
Total fowl	70	20.2	1-50	3,676

[101] SOURCE: William F. Clark, data collected through personal survey, Kingdon of Tonga, August-October, 1974.

[438] Livestock, as a food source or a cash product, is raised
[439] almost exclusively for the domestic market. Very little of this
produce is exported to neighboring nations. In addition, the
domestic role of livestock is complex and complicated by tradition.
262 Pork is consumed more frequently than any other meat source, exclud-
272 ing fish, and with the possible exception of poultry. Fresh milk,
for feeding small children, is usually in short supply, although
the large number of goats on the islands represents a potential source
of milk protein. Tradition, however, undermines the widespread use
262 of goat's milk. Food production and consumption patterns in tradi-
tional Tongan society are more often influenced by social custom
than by need.

231 Survey results indicated that horses are owned by 38 per-
492 cent of Tongan households, and are used as a means of transportation.

237 TABLE 17.--Approximate Soil Nutrients Per Ton of Manure.

	Nitrogen (N) lb.	Phosphoric Acid (P_2O_5) lb.	Potash (K_2O) lb.
Horse	13.2	5.1	12.1
Cow	11.4	3.1	9.9
Pig	9.9	6.7	9.3
Sheep	115.8	6.7	18.0
Hen	21.0	16.4	10.2

SOURCE: D. Acker, Animal Science and Industry (Englewood Cliffs, New Jersey: Prentice-Hall, 1971.

231 remain most important as an instrument within the Tongan social structure.

Cash Cropping

241 The crops grown primarily for the international export
245 market are coconuts and bananas, although vanilla, melons, fruits
and vegetables are also produced in less significant quantities.
Survey results, substantiated by personal observations, indicated
that most landholdings are at least partially planted with coconut palms, while many 'apis of Ha'apai and Vava'u are totally
241 planted in palms. As the desire or necessity for cash income
increases, a greater proportion of the typical 'api will be planted
in some type of cash crop.

245 Coconut surpluses, beyond the needs of the family, are usually
439 sold as copra to the Tonga Copra Board. Bananas in surplus are sold

439 [245] [241] to the Tonga Produce Board. The Produce Board also handles the export of vegetables, melons and miscellaneous fruit and agricultural production directed to the international market.

241 Cash cropping, as mentioned previously, consists mainly of two broad categories: long- and short-term production. In addition, each may further be classified as either for domestic or international sale, although short-term croppings (i.e., vegetables, fruit, and melons) are usually domestically sold and long-term (i.e., coconut products and bananas) are international export items.

Cash cropping remains largely in the hands of Tongan officials, with only a few exceptions, including church plantations. The European contribution to this agricultural component is decreasing as leases expire and are not renewed.

439 245 Coconuts, copra, and other coconut products are the major cash crop of the Kingdom, representing as much as 85 percent of total agricultural exports (Table 18).A 245 434 Survey responses indicated that all landholders rely upon the sale of copra for at least a portion of the household cash income. While statistics from the Department of Agriculture evidenced that the majority of coconut sales originate on Tongatapu, survey data revealed that the proportion of total household income, earned from coconut production, is greatest in Ha'apai. 241 [245] The fact that Ha'apai soils are often not ideally suitable for large scale production of other cash crops, such as bananas, may represent an explanation for this apparent contradiction. Also, in areas of high population density, such as Ha'apai, a smaller proportion of land can be allocated to

A[See Category 439, p. 103--Analyst.]

[TEXT CONTINUED ON PAGE 104]

439 TABLE 18.--Produce Exported Through the Tonga Produce Board and Copra Board, 1972-1973.

Commodity	Unit	Quantity		Value T$	
		1972	1973	1972	1973
Bananas	56 lb. case	119,186	112,628	321,946	304,099
Watermelons	Loose	34,968	91,070	67,219	88,934
Pineapples	18 per case	3,003	1,426	4,205	1,997
Plaintains	56 lb. case	1,977	523	4,522	1,361
Swamp taro	56 lb. case	3,534	1,770	10,876	5,548
Taro Tarua	Bags	419	110	586	849
Yams	43 lb. case	731	82	2,118	402
Avocadoes	15 lb. case	1,507	936	1,507	1,145
Capsicums	15 lb. case	13,080	10,801	16,309	14,534
Tomatoes	14 lb. case	3,720	4,761	3,102	4,133
Vanilla	60 lb. crate	20	31	5,198	8,693
Egg plants	---	141	96	190	147
Cabbage	cartons	---	2	Samples only	
Lettuce	cartons	---	3	Samples only	
Copra	ton	---	12,362	---	2,175,461

SOURCE: Report of the Minister of Agriculture (Nuku'alofa: Government Printer, various dates).

245 kiln drying shed, introduced in 1938, is replacing the more traditional sun-drying method, being recognized by most Tongan producers as more efficient.

Historically, Tongan copra had the reputation of being [687] poor quality. However, in 1926, government legislation made it a statutory offense for a trader to be in possession of damaged copra. Since the introduction of such laws, the quality of Tongan produce has steadily improved and today ranks among the world's best.

439 647 [655] Coconuts and copra are marketed through the Tongan Copra Board, which is a government monopoly established in 1942. Collection points are located throughout the islands, while the principal grading and storage facilities are in Neiafu, Pangai, and Nuku'alofa. The Tonga Copra Board purchases copra from local producers, and then resells it in the international market. Maude (1965) noted the variance in the international market price (FOB) of copra, as compared to the price paid local producers. After all payment to producers has been made, 36 percent of the FOB price remains with the Copra Board to cover management, handling, export charges and miscellaneous expenses. A survey of local producers throughout the Kingdom indicated their concern and dissatisfaction with the government's arrangement. Some farmers expressed the opinion that internal corruption caused the cash variance. It is clear that while the average Tongan farmer does not understand the management and market economy of copra, a growing resentment of the pricing policy of the Copra Board is evident.

439 Bananas are Tonga's second most important cash crop for the
245 international market, although exports and capital earned by this
crop have decreased significantly since 1967 (Table 18, p. 103,A
and Table 19, below). Tongatapu is the principal producer, with
439 Vava'u being second. Banana exports represented 45 percent of the
value of total exports in 1967, but by 1973, equaled less than 15
percent. While this percentage has continued to decline, the
245 market price for banana produce has generally risen. Owing to this
439 rise in price, many farmers expressed a willingness to produce
bananas, providing governmental assistance was received in combating
245 crop disease. (As mentioned previously, the principal reason for

439 435 TABLE 19.--Tongan Banana Exports and Their FOB Values.

Export Year	Total Quantity of Export (thousands of lbs.)	Total Revenue Earned by Banana Exports
1965	22,708 lb. at 4.1¢ a lb.	$ 941,222
1966	31,883 lb. at 4.2¢ a lb.	1,337,554
1967	43,949 lb. at 4.1¢ a lb.	1,794,000
1968	37,674 lb. at 4.6¢ a lb.	1,738,679
1969	15,147 lb. at 4.5¢ a lb.	683,440
1970	10,268 lb. at 4.5¢ a lb.	465,950
1971	7,706 lb. at 4.8¢ a lb.	368,970
1972	6,743 lb. at 4.8¢ a lb.	327,914
1973	6,272 lb. at 4.8¢ a lb.	302,400

SOURCE: "Banana Exports Have Declined Sharply," Tonga Chronicle, August 8, 1974.

A[See Category 439--Analyst.]

245 decreasing production of bananas is the spread of black leaf streak, bunchy top and scab moth.)

439 [647] Marketing of banana produce, through the Tonga Produce Board, is often difficult because of improper scheduling of shipping facilities and the subsequent sale of under or overripe fruit. [435] In one example, 9,000 cases of produce became overripe while in wharfage awaiting shipment, resulting in the fruit being sold for 40 cents per case (Report of the Minister of Agriculture 1973, p. 5). The bulk of banana produce is shippped to New Zealand, although the shipping difficulties and quality control remain 245 obstacles to full entry into this market. These same problems 439 with marketing, shipping and quality have been effective in removing [654] many Tongan farmers from banana production. At present, the Produce Board reports that export levels are so low that levies are not sufficient to provide a comprehensive service to growers in such areas as disease control ("Banana Exports . . ." 1974, p. 5).

439 438 In addition to the exportation of bananas, coconut, and miscellaneous melons, fruits and vegetables to international markets, small quantities of produce are also traded among the islands, the most important of these transfers being from 'Eua to Nuku'alofa on Tongatapu, and from Nuku'alofa to Pangai and Neiafu. This movement involves not only domestic produce, but also food imports such as tinned meats, sugar, flour and a wide range of foodstuffs sold through the local stores (fale koloa).

443 [438] [366] Large quantities of produce are also marketed domestically. Although some produce is sold in several smaller settlements, the

443 largest markets are Nuku'alofa in Tongatapu, Pangai in Ha'apai, and
[366] Neiafu in Vava'u. Such markets cater to two principal groups,
although many people travel to market to buy, sell, or socialize.
443 Those members of the non-Tongan population who do not lease land,
439 such as church facilities, and must purchase market food, repre-
sent one group. Though not large in comparison to the Tongan popu-
lation, this group does contribute a significant cash input to the
443 local economy. The second group consists of landless Tongans and
those Tongans who do not farm or garden intensively and derive cash
income from other means.

Producers, or members of their families, most frequently sell
[512] directly to the consumer. Saturday is market day (although the
major markets carry some business throughout the week, except Sunday)
[427] and the market area becomes the center of urban activity. Individu-
als having produce to sell may rent one of several types of stalls
443 or floor space, upon which to display their produce. The staple
438 foods (i.e., tubers, coconuts, and bananas) are the major items
sold, although other types of food produce and miscellaneous items,
443 such as shells, carvings, and handicrafts, are also available. Mar-
512 keting hours generally are from 8:00 A.M. to 5:00 P.M., with the
busiest time being in the forenoon and early afternoon.

123 Personal observations, plus discussions with sellers,
124 revealed several marketing patterns. A few farmers or craftsmen
443 sell each day or week on a regular basis, and generally have rented
427 stalls which can be locked at the end of each day. Rental for these
[435] is on a monthly basis, and costs the producer eight dollars per
month.

000
443 month. On the other hand, some farmers market their produce only
monthly or occasionally during the year, depending upon when a cash
443 need arises. A third type of seller is the craftsman who produces
439 items of quality specifically for the tourist trade (i.e., handi-
crafts of wood, shell or tortoise shell) and markets these goods
only when a tourist ship or plane has brought passengers from Fiji
or Samoa. Thus, the craftsman's sales are largely independent of
the needs of native Tongans. The prevalence of this type of pro-
ducer is expected to increase, as tourism develops within Tonga.

443 A variety of baked goods may also be found in the market
438 on Saturday. Though largely devoid of flavor and extremely heavy
[262] in texture, Tongan "cakes" are popular and sell rapidly. An
excellent market also exists for peanuts. Supply rarely is adequate
to meet demand. The sale of kava (from which "Tongan beer" is
made) is also brisk. Kava is lightweight and easily transportable.
Producers on Ha'apai, Vava'u and many of the isolated islands often
send kava to Nuku'alofa for sale.

[655] The major competitor to the open-air market is the Vuna
Government Market, which handles the majority of fish and meat sales
to Nuku'alofa and surrounding Tongatapu. Many of the local stores
are also beginning to sell fresh meat products. Consequently, the
amount of meat sold in the market fell from 160,771 pounds in 1971,
443 to 94,684 pounds in 1973. The sale of fresh fish in the market
438 rose during the same period, mainly due to the operation of a gov-
655 ernment fishing vessel which had a total catch of 203,243 pounds in
228 1973 (Report of the Minister of Agriculture 1973, p. 24).

226 Fishing activity is often not considered part of the agricultural
226 sector of an economy. However, in Tonga fishing represents
434 a significant cash input to the local agricultural base. Of the
total survey sample, over 15 percent of those questioned indicated
that they derived some part of the household cash income from fishing.
228 The Tongan government obviously considers fishing to be of
655 significant value to the national economy, in that it includes
evaluations of fishing catch and sale within the annual reports, and
[505] operates one major fishing vessel, the Ekiaki. This ship is of
modern construction and contains some refrigeration and pre-processing
facilities. In 1973, the Ekiaki landed a total of 203,243 pounds of
fish, representing a catch percentage (catch per 100 hooks) slightly
better than Korean and Chinese operations in the region. This total
catch was smaller than anticipated, due to mechanical breakdowns and
the lack of trained operation personnel.

228 Tongan waters are a largely untapped source of food, including
136 such fish species as tuna, bill-fish, and shark (Report of the
443 Minister of Agriculture 1973, p. 30). In 1973, sale of fish through
434 the Vuna market equaled over $15,000, or 120,000 pounds. However,
[438] demand for fish in Nuku'alofa far excelled this amount. Personal
observations evidenced that on those days when fish is to be sold,
crowds of consumers wait hours before the market opens.

228 Despite the fact that domestic demand for fish is unsaturated,
439 40 percent of the Ekiaki's total catch, for the year 1973, was 434

228
439 434 sent to canneries in Pago-Pago.[1] A recent Japanese survey, which
000 mapped the most productive Tongan fishing grounds, suggested that
up to 90 percent of the potential catch could be exported to Japan
(Kyokuyo, Hogai Co. Ltd. 1965, p. 2). In view of the domestic
demand for fish products, plus the nutritional status of many urban
Tongan inhabitants (to be discussed in the following chapters),
such exportation would be totally irresponsible to the needs of the
Tongan people.

226 434 Small scale, private household fishing activity has done
228 little to meet domestic demand. Survey responses indicated that
the lack of investment capital for necessary fishing equipment is
the major obstacle to expansion of private fishing enterprises.
228 Discussion of this problem with part-time and full-time fishermen
227 439 revealed that not only is the basic cost of equipment prohibitive,
651 but a 33 percent import tax, charged by the government for such
items (i.e., nets, lines and hooks) makes purchase impossible for
228 the average Tongan. While this situation insures the governmental
655 monopoly on commercial fishing, it hinders the expansion of fishing
activities necessary for meeting the domestic demand for fish
products.

228 Another major obstacle to the expansion of fishing activi-
ties in Tonga is the general lack of preservation and holding
[655] facilities throughout the islands. Again, the only adequate

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[1] Ironically, much of this same catch is processed in canneries and resold as tinned fish products to Tonga at a sizable increase in price.

228 facilities are governmentally controlled. Thus, most fishermen
[655] catch only that which will satisfy family needs, plus a small quantity for immediate sale.

434 Data determining income levels from all types of cash food production (including fishing) was collected during household surveys.[1] Range of income was from zero to $1,200 per year, with a mean of $480 per year for those farmers selling produce. Sale of copra results in the largest cash income, with vegetables (all types) second and bananas third.[2]

434 During survey discussions concerning income, it became
178 apparent that cash incomes have increased substantially over the
past several years. As a result, Tongan farmers are enjoying an
increase in purchasing power, reflected in the purchase of non-
traditional items, such as imported foodstuffs or the purchase of
[439 food items from local producers. However, while few farmers are
totally dependent upon this new cash-based living, the significant
262] increase in the use of canned goods, sugar, bread and assorted
imports is an obvious indication of the direction of this trend.

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[128] [1] The average Tongan farmer keeps no record of his yearly or monthly earnings and survey information probably reflects mere estimations. In addition, in several instances, it was apparent that income levels were being exaggerated or minimized for one or more reasons. Although obviously skewed data was excluded from survey data compilation, it is reasonable to assume a margin of error still exists. For this reason, only range and mean of income are used, in an attempt to minimize the effects of misleading data.

[2] The other major contributors to the household cash income include the sale of handicrafts, plus income derived from relatives or overseas sources.

434 (This concept, which is becoming more notable in all segments of
178 Tongan population, is analyzed within the following chapters.)

241 In summary, while many aspects of Tongan agriculture have
178 remained basically unchanged through history, there have been
several significant alterations with respect to population growth,
178 land distribution and cropping practices. The most significant of
434 these changes has been the development of cash cropping and the
[241] subsequent rise in purchasing power of the average Tongan farmer.
[439] An indication of these alterations is the increased incidence of
[262] material items within the household, plus reliance upon imported food
products, such as tinned meat, fish, bread and sugar.

245 The continually good market for copra and coconut products
241 has resulted in many 'apis being planted almost entirely with palms,
[178] and less production of traditional foodstuffs. In addition, in
densely populated areas where food crops are interplanted with palms,
the competition for sunlight, soil nutrients, and moisture insures
significantly lower yields from food plants.

178 Low production yields associated with decreases in soil
241 fertility are frequently the result of the shift to a more continuous
exploitative cropping system. This change is stimulated by the
178 Tongan farmer's desire for increased cash income, and by increasing
241 population pressure on land available for cultivation. This popu-
161 lation pressure is intensified by the migration of individuals to
Tongatapu from the other island groups, especially Ha'apai. The
Tongan situation is becoming increasingly intensive, with often a
crop/fallow period ratio of one to one, and a supported population

125 analysis of these samples revealed that in each case, quality was
146 below suggested standards in content of protein, fat, carbohydrate
146 and moisture (Table 21). This was especially true of the sample of
K. & R. Corned Meat Loaf. This product is frequently consumed in
435 Tonga, a probable reflection of its lower cost. Price surveys
[262] indicated that this meat loaf sold for approximately T$.30-.35,
while the other canned meat sample analyzed sold for T$.75-.85.[1]

262 Fresh beef from Australia and mutton from New Zealand are
146 also consumed in greater quantities in urban Tonga. Analysis of
[125] random samples purchased in Nuku'alofa showed the surface fat of
beef imports to be in excess of 73 percent of total product weight.
Similarly, mutton samples not only evidenced a high fat content but
were also greatly weighted by bone.[2]

262 On the other hand, individuals residing in rural areas consume more fresh meats such as pork, poultry, and fish (although fresh and canned fish are popular throughout the Kingdom), plus a greater variety of tubers. Yams, sweet potatoes, and taro retain their important traditional role in the Tongan diet within the rural

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● [439] [656] [1] The results of the analysis of both products, which are imported from Australia, emphasize the fact that the Tongan government, despite recommendations by members of medical professions and church groups, refrains from monitoring the quality of products imported into Tonga. This neglect is exploited by foreign commercial organizations as evidenced by the analysis of the above canned meats, in addition to imported fresh meat samples (Appendix C).^A

[659] [2] The Tongan government recently announced plans for a refrigerated vehicle to transport fresh meat to rural Tongatapu. The value of such a scheme is questionable, considering the low quality of the products to be transported.

A [See Category 125, p. 186-188--Analyst.]

272 a popular drink at mealtimes. It is actually little more than hot
sugar water and remains a poor substitute for milk or broth.[1]

262 Snack foods consumed by urban preschoolers also are of poor
146 nutritional quality such as imported cookies (called biscuits),
273 soft drinks, and miscellaneous items (cheese puffs were observed to
be favorites). In rural areas a child is most often given coconut,
262 taro or a fruit, such as papaya or mango, when in season. Rural
children also enjoy a greater variety of foods per meal, with
several tubers being supplemented by fruit and frequently meat or
fish.

146 To summarize, the preceding data indicated that individuals
residing in urban Tonga consume less nutritionally balanced diets.
[124] This was substantiated by interviews with the medical staff of
Vaiola hospital on Tongatapu. The urban group most frequently having
substandard diets was found to be migrants from other islands or

---

272 [1] The low consumption of milk in all regions of Tonga, but
146 especially Nuku'alofa, is a nutritional shortcoming in the Tongan
diet. Imported milk sources such as powdered, sweetened condensed
[439] or evaporated products are available and, if used properly, could
be influential in improving the preschool dietary condition. However, the most frequent way of serving milk is to substantially dilute the mixture with water (often unclean) and thereby reducing the nutritional value. Domestic sources of cow's milk are scarce and expensive, while the large milk goat population in Tonga represents a largely unused potential milk source. A nutritive comparison of goat's milk and cow's milk indicates that goat's milk is quantitatively higher in most vitamins and minerals, contains more fat, a higher total caloric value in addition to a reasonably equal protein value. Widespread use of goat's milk, as suggested in previous chapters, would improve the nutritional conditions of many currently malnourished Tongan children. However, the consumption of goat's milk is believed to be indicative of low social prestige and government officials are unreceptive to information concerning its potential value.

121
369 urban areas, (2) displaced individuals migrating due to increased
161 population pressure on agricultural land, and (3) migration of
166 those rural individuals with sufficient income from cash cropping
178 enterprises. (The above is summarized within Figure 2).

178 Despite increases in the absolute quantity of domestic food
121 production, research results indicated that population growth more
241 than nullifies these gains. This situation is aggravated by the
withdrawal of acreage from domestic food production resultant from
(1) expanded cash cropping, and (2) increasing absentee landholding.
[439] The ensuing gap between population and domestic food needs
requires that Tonga import large quantities of foodstuffs (Table 20). A

121 Further investigation revealed that the consequences of
178 urbanization in Tonga are (1) decreased domestic food production
146 per capita, and (2) retarded physical development of preschool
369 children most likely due to inadequate dietary quality, as shown
121 in Table 21, and Table 28 (p.188). B However, in order to strengthen
the reliability of the preceding hypotheses, it is recommended that
they be tested in relation to alternative societies.

Implications

241 The Tongan social structure and systems of land tenure and agriculture, in combination with expanding urbanization, require that Tongan governmental officials realize the vital role of agriculture in the Tongan economy. To date, the Kingdom lacks any other alternative resources. Thus, care must be taken to stabilize and revitalize agriculture and domestic food production.

A [See Category 457, p. 124--Analyst.]
B [See Category 146, p. 136 and 138--Analyst.]

313 sector is directed to the construction of banana cases and local
313 housing construction. It should be noted, however, that since
654 1954, the Tongan Department of Agriculture has begun a small scale
reforestation program designed to determine the feasibility of
developing this as an exportable economic resource (Great Britain
Colonial Office 1956-64, p. 22).

241 Other species of vegetation which are culturally important
to Tongans are those which produce the majority of the nation's
food. These include the breadfruit, coconut, banana and various
root crops.

433 Until recently, Tonga has had the distinction of being one
of the few Pacific territories which could be called a self-
supporting community (Harris 1966, p. 127). Economically, Tonga is
essentially an agricultural country. There are no notable developed
mineral resources and the only industry consists of minor processing
439 facilities for agricultural products. Economic necessities from
outside the islands are paid for by exports of bananas and coconut
457 products in most cases. Until recently, Tonga enjoyed a favorable
balance of trade. However, this balance has tended to reverse in
the past few years with the tendency toward larger and larger defi-
cits as shown in Table 20.A

511 The population in the past has been in the position to plant
[438] a large portion of their food requirements. Any cash requirements
were usually provided through the sale of bananas and coconuts to
regional collection points (Great Britain Colonial Office 1956-64,
511 p. 11). This subsistence system is rapidly altering due to increasing
178 A[See Category 457, p. 124--Analyst.]

511
178 pressures of population upon the land. The result of this pressure
[439] is seen in part in a growing dependency on imported foodstuffs.

Exports have been the only significant source of income
457 for the Kingdom, though earnings from tourism and overseas remittances
439 are becoming increasingly important. Of this trade, copra, bananas,
and pineapples represent the only items traded in quantity internationally. Copra currently accounts for more than 70 percent of the total exports and, therefore, the export income of Tonga is largely at the mercy of fluctuations in world copra prices (Kennedy 1968, p. 20; Britten 1968, p. 53).

439 A diversification of export crops is possible under existing
[131] environmental conditions. However, the isolation of Tonga from
international trade routes coupled with distance from markets make large scale diversification unlikely in the near future.

423 Fundamental in the economy of any agricultural nation is the
[643] policy formation regulating land use by the native element. In
Tonga, ultimate title to all land rests with the King. However, every individual is entitled to an eight and one-qaurter acre farm lot and a two-fifths acre town lot. Obviously, in light of the growing population situation, the plan cannot work as the policy intends. However, in the past the policy had the effect of allowing most people the opportunity to plant and earn a subsistence
423 living from the earth. The law, at present, states that males
641 upon reaching 16 years of age are required to register with the
[651] government for tax purposes. At the same time, all are invited to

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place to see something of the usual occupations of the natives at 123
their homes. One of the things, that strikes a visitor most upon
his arrival at Tongatabu, is the incessant hammering which 287
commences at daybreak, and continues without intermission until [512]
about noon. To satisfy ourselves as to the cause of this, we
entered the first house in which we heard the noise, and found
two women engaged in making tappa, or native cloth. They
were seated on the ground, one on each side of a log about 6 feet
long and 6 inches square, which was raised just clear of the floor
by means of short bits of stick placed under the ends of it. Each [412]
woman had a piece of the bark, of which the tappa is made, laid
before her on the log, and was beating it with a wooden mallet
about a foot in length, the handle being rounded, and the striking
end square, with grooves in the sides. They wetted the bark from [415]
time to time, sprinkling water upon it from a large wooden bowl
that stood upon the ground beside them.

In another hut a woman was shaving the head of a young child 302
with a bit of glass broken from the neck of a bottle, dipping her [412]
finger into a cocoanut-shell of water and wetting the place as she [415]
went on; the little brown head became perfectly smooth and shining
under the operation, which was so skilfully performed as not
to disturb the child as it lay fast asleep on her arm. They call
this operation fa-fai-ulu; literally, shave the head: shaving the
chin being called te-lee kava, razor the beard.

In the next hut two men were busily employed in rigging the 523
model of a canoe, to sell or barter on board the ship; they were 439
very intent upon their work, leading all the ropes correctly, and
finishing every part with great care.

In one house we found a native artist, a woman who made 531
designs for patterns on tappa. She was at work, and had several
lying by her which she had just finished. In a corner of the hut 251
lay a pile of enormous yams, some of them being upwards of
4 feet in length. This store, together with other provisions, had [843]
been collected by the husband against the confinement of his wife,
which appeared likely to take place very soon. The man sat 855
watching her, and nursing a fine boy, and seemed quite proud of 123
the attention with which we regarded his wife's performance. 609

In the course of our exploring excursion we called upon the
principal man of the place, who had presided at the school 123
examination in the morning. He was sitting alone in one corner 634
of the matted floor of his house, and welcomed us as we entered, [609]
desiring us to be seated beside him. The house was in no way [352]
superior to the generality in the place, except in being a little
larger and having the court-yard round it more carefully kept;
the only piece of furniture in it was a large kava bowl, which
hung up in the apartment. In a corner of the court-yard lay, [534]
[202]

what at first we took to be a canoe, about 5 feet in length and 634
18 inches deep; this was the "lali," or great drum of the town, 202
which was beaten to call the people together on important occa- 123
sions. The old chief, seeing our curiosity excited about it, took 534
up the sticks, two pieces of wood about 18 inches long, and began [609]
to beat it most vigorously, smiling all the time and nodding his
head as though he were giving us quite a musical treat, becoming
so energetic that we were afraid he would bring the whole place
to see what the matter was. It was struck on the edge, one side
being much worn away from continual beating. Although the
sound, when standing near the drum, did not appear to be very
loud, it could be heard distinctly for a considerable distance.

From the Governor's we went to the hill above the anchorage, 123
where the Meander's band was coming to play in the afternoon. On
the road we were passed by crowds of natives hurrying to the spot.
As the band had not yet arrived we went to look at the inside of the 346
church, which is a very perfect specimen of the native style of
building; the floor was about 130 feet long by 44 feet wide; the
roof being about 35 feet high in the middle, oval shaped and very
deep. There were no windows, the light coming in from the
openings in the sides, which served as entrances. The roof was
placed upon a frame of very large spars, secured where they
crossed each other by strong lashings, and supported by posts
below. The whole floor was matted and without division of any [352]
kind, excepting a low rail before the pulpit. This church was
built for the missionaries by King George in a very short time, [643]
upwards of a thousand people being employed in its erection. [797]

While I was making a sketch from the hill, a young man came
to me, and said he had a fine canoe to sell, and wished very much 123
that I would go home with him to look at it, saying, in English, 609
"Mine is a very good canoe; supposing you want it, I make 439
the sail to-night;" and then, admiringly, as though he were [126]
looking at it, "O it is a beautiful canoe." Being rather more
anxious about the sketch than his canoe, I did not pay much
attention to what he was saying; and he continued to stand at
my elbow, apparently watching every touch of the pencil very
intently. Imagining that he was interested in the proceeding, I
stopped, and held the book up for him to look at; but the canoe
was all he was thinking about, and eagerly seizing the opportunity
to direct my attention to his hut, among the cocoa-nut trees just
below, he came again to the point, saying, persuasively, "Do
come to the canoe;" and looking much disappointed when I said
I could not then spare the time, he continued, in a resigned tone,
"Well, you have the canoe; I make sail to-night," mentioning [435]
the sum of five dollars as the price of it. This latter idea put a
stop to any further negotiation on the matter as far as I was con-

102: Brierly T-3 (1850) 1[illegible]52
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123 cerned; and thinking that by a rather decided answer I had got
609 rid of him, I again went on with my sketch.

● [439] The natives had begun to assemble on the hill in considerable
numbers, coming in troops from all quarters and gathering round
123 the spot where the band was to play. The young women and
.123 boys who had been crowding round me to see the sketch, now ran
609 off and joined the rest, all except my canoe friend, who still kept
439 hovering about, watching at a short distance until he should again
catch my eye. There was now a fine chance, so he came up
quite close, and looking me for a short time full in the face, with
a most absurd, half-dejected, half-laughing expression, said, in an
abstracted manner, and as if addressing no one in particular,
[435] "O, it is a beautiful canoe, mine." These continued interruptions became at last rather annoying, and as canoes could be obtained alongside for an old coat, I endeavoured to explain to my friend that his ideas were far too extravagant. He listened with an air of deferential attention until I had quite done, then said quietly, "You have not seen my canoe;" and warming with his subject, added energetically, "O it is beautiful!" After this, however distant he might be from the spot, he was sure to come and find me out whenever I landed, and haunt me with his "beautiful canoe." Often, when sketching in some retired part, where I hoped that for once I was safe from his persecution, I was sure to see my friend sitting somewhere among the trees, apparently quite unconscious of my presence, until he could quietly glide up and get near me without being perceived; and when close enough to be heard, he would make some observation in praise of his canoe.

Sinbad was never more tormented with the old man on his
shoulders than I was with this provoking native and his eternal
[435] canoe. At last I was fairly beaten by his passive system, and
finding his canoe really a good one, I gave him—not the five dollars exactly—but a whole wardrobe of old clothes, which pleased him quite as well.

123 In this digression about the canoe I had almost forgotten the
band, which arrived in due time, the people all sitting down on
the ground in the most orderly manner, and forming a great circle
round it, the best places being given to the women. The music-
[201] stands having been set up, and all the preparations completed, a duet from Norma, the Old Hundredth, Drum Polka, Irish Quadrilles, and British Grenadiers, followed each other in rapid succession, the principal chiefs expressing their approval at each pause between the pieces by calling out Mālo mālécah!—Well done! sweet! adding, "go on again."

501 *June 21st.*—At daylight this morning, two large double canoes,
decked over, and having houses upon them, were seen lying at

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000 [648] On board the ship we found the chief of the Feejee party we had seen on shore. He was the brother of Thakubau, the most powerful chief of the Feejee Islands, and was here on a visit to King George, to whom he had brought a number of presents. He had come off in a small canoe, bringing with him, as his interpreter, an old English sailor living at Nu-ku-alófa, and was taken round the ship below, into the stores and through the wings, all of which astonished and delighted him; but what he admired more than all was the marine sentry at the captain's door, and he had a chair placed so that he might sit and look at him; not satisfied with this, he jumped up after a short time, and taking him by the hand, walked gravely backwards and forwards with him, until seeing another, stationed on the main deck forward, he left the former that he might go and walk with him also. He was a noble specimen of a savage, and seemed to be absorbed in two ideas, extreme vanity and a love for everything connected with fighting, and appeared to consider himself vastly superior to King George, or anybody in Tonga. One side of his face was painted brilliant red, the other being left of the natural dark-brown colour, a clear line of division running down the centre of the nose. As a breast ornament he wore a large boar's tusk, suspended by a string of small blue beads; but the most extraordinary part about him was the arrangement of his hair and beard. The front part, all round the face, was dressed in a very peculiar manner, and at a little distance had the appearance of a compact mass of light-grey felt, clipped into a horseshoe shape, and standing up as stiffly as though it had been cut out of wood; the hair at the back of the head being of a different colour, light-brown and frizzled out into an immense even bush, into the middle of which was fastened a great tail of jet-black hair, done up into a number of separate strands, and hanging 3 feet down the back; his large black bushy whiskers being trimmed with the greatest nicety and carried round under the chin, a small black moustache, with pointed ends, just covering the upper lip. In the front of his hair he wore a narrow comb about 15 inches long, which stuck out like a horn. He was presented by Captain Keppel with a sword and belt, and a looking-glass, things which seemed to please him more than anything else that could have been given him. ● [439] Upon leaving he expressed his regrets to Captain Keppel that he had given away on shore all the shells and other things which he had brought with him from Feejee, and had nothing left to offer him, at the same time drawing out and giving him his comb, and wishing that the Meander might pay him a visit at the Feejees. He went on shore standing up in his small canoe and admiring the sword. Soon after the Meander got under way and we sailed for Tahiti. 122

784 tent under tabu, but this restriction, although observed while he
609 was in sight, had evidently no great weight with them, for when
he was gone they came crowding in as before.

609 *Friendly Disposition of the Natives.*—The friendly disposition
of the Tonga Islanders is worthy of remark. Immediately
upon our arrival, nearly every one who went on shore had
609 his particular friend. I was adopted by a chief named Julius,
who exchanged names with me, and was very particular in making
123 me understand that I must apply to him for anything I might require,
and regularly came down to meet me when I landed, always
609 wishing that I should go and dine with him. They showed great
attention in this respect to all the officers who went on shore, taking them to their houses when they came back from shooting, laying out before them boiled fowls, yams, cocoa-nuts, and bananas, and frequently, when a whole party had dined in this way at one place, some other natives would come who had also prepared a dinner for them, and be greatly disappointed upon finding that they had been already entertained, trying to tempt them to eat more by bringing what they had prepared and spreading it out before them.

186 *King George's Flag.*—At the time of our visit the Tongaese had no distinguishing flag, the chiefs ornamenting their canoes with long streamers made with pieces of coloured cotton arranged according to fancy, and it was suggested to the king that he should have a national flag. Since this, he has been to the missionaries and requested that they would prepare one for him, which I hear they have done, and it is described as follows:—"It has occurred to us, that a fit emblem of the past history of Tonga might be a club and a bow and arrows, showing the warlike character of the people. For its present Christian state we select the emblem of a dove with an olive branch, and for the natural state of Tonga, and the bounty of Divine Providence, we fix upon the cocoa-nut tree, as affording so many and various articles for meat and drink and building and furniture."

● 439 *Proposed Trade between Tongatabu and New Zealand.*—There
has been some attempt to establish a trade in cocoa-nut oil between
these islands and New Zealand. It was proposed that King
439 George should collect sufficient cocoa-nut oil to freight a small
643 schooner, which was to be sent from New Zealand when the cargo
should be ready for it. The oil was then to be sold, and the vessel purchased for the king with the proceeds. This plan does not seem to have been met very warmly by the king, who, I believe, once had a vessel of this description, but having lost her, he has given up the idea of trading, saying that he is tired of trying to get rich, remarking that if one of his large canoes is lost he can easily get another from the Feejees; that he wants nothing among his

own people, and finds sufficient employment in attending to his 643
duties as King without meddling in trade. He is one of the best [439]
sailors among the Tongaese, and has frequently shown remarkable [157]
coolness and presence of mind in situations of danger. When we
were at Tongatabu he was about to build a jetty over the reef at
the anchorage. He does not smoke, and his example is generally 276
followed by his people, smoking being considered as a mark of [643]
dissipation. At one time, however, it prevailed to a great extent, [178]
nearly every man and woman, and even many children, smoking [177]
whenever they could get tobacco. The use of it is discouraged [747]
by the missionaries, but I imagine that some of the natives still
secretly indulge in it, for while I was sketching one day a young
woman came up to me, and, first looking cautiously around,
inquired in a confidential whisper if I had any tobacco, at the same
time showing me a short black pipe.

Canoes.—The model exhibited will serve to show the construction 501
of these better than any description. They are steered with a large paddle on the lee quarter, and it will be seen that the lower part or foot of the sail is secured to a spar in the same manner as the sails of the "America" yacht. King George's canoe is 90 feet long, the sail being 90 feet high and 60 feet wide at the top. These large double canoes will carry as many as 200 men.

In 1847 King George, fearing that the French might interfere 643
with him, wrote a letter to the governor of New Zealand, requesting 648
that he might with his people be received as subjects of the
British crown.

I would venture to remark that it must be of advantage to cultivate 000
friendly relations with the inhabitants of all such islands as
are desirous of being connected with us, more especially as it may
be very desirable to form depôts for our steamers at some of the
islands. It has been exceedingly difficult for me to draw a line 121
between the geographical and the ethnological in this paper, as they are so intimately connected; but I trust by this simple narration, illustrated by the pencil, that many, who would have no taste for a voyage of 12,000 or 15,000 miles, will in some measure realize the condition of our antipodean fellow men; and it is to be hoped that in a comparatively few years the connexion existing between our Australian colonies and the mother country may also include these beautiful and fertile islands.

Sailing Directions for entering Tongatabu.

HAVING no map of Tongatabu, or any knowledge of the place, we were in doubt 122
as to which was the proper entrance to the anchorage, and the following sailing 114
directions were afterwards kindly given me by Mr. May, master of the Meander,
as the result of his observation upon going in.

When the northern point of Eua bears S., steer direct for the small island of Eua 131
Eki, on nearing which several small islets will be observed immediately to the
133